

March 19, 2004

State of Utah
Division of Oil, Gas & Mining
Attn: Diana Whitney
1594 West North Temple - Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Applications for Permit to Drill: Federal 1-18-9-18, 3-18-9-18, 5-18-9-18, 9-18-9-18, 11-18-9-18, 13-18-9-18, and (15-18-9-18).

# Dear Diana:

Enclosed find APD's on the above referenced wells. If you have any questions, feel free to give either Brad or myself a call.

Sincerely,

Mandie Crozier

Regulatory Specialist

mc

enclosures

RECEIVED

MAR 2 2 2004

DIV. OF OIL, GAS & MINING

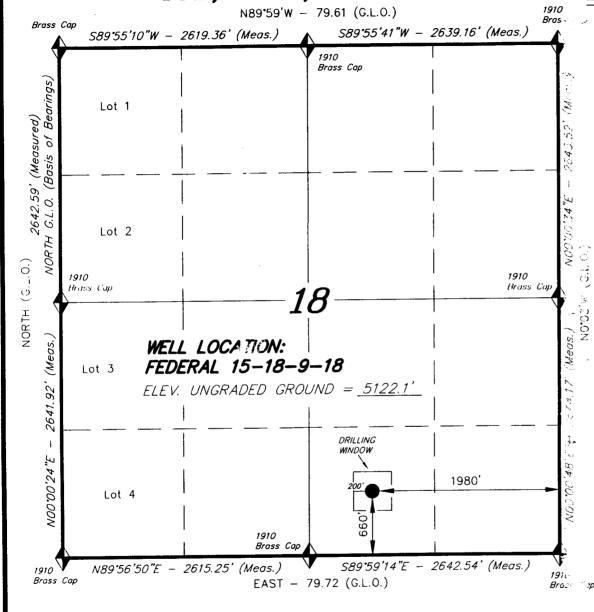
Form 3160-3 (September 2001)			FORM APPROV OMB No. 1004- Expires January 31	0136	
UNITED STATES		, 2004			
DEPARTMENT OF THE IN		5. Lease Serial No. U-39714			
BUREAU OF LAND MANAC			6. If Indian, Allottee or Tri	he Name	
APPLICATION FOR PERMIT TO DE		N/A	oc mane		
la. Type of Work: DRILL REENTER	₹		7. If Unit or CA Agreement N/A	, ivaine and ivo.	
			8. Lease Name and Well No	).	
1b. Type of Well: A Oil Well Gas Well Other	Single Zone 🚨 Multi	ple Zone	Federal 15-18-9-18	•	
2. Name of Operator			9. API Well No.		
Inland Production Company			43-04	7-35587	
3a. Address	3b. Phone No. (include area code)		10. Field and Pool, or Explor	atory	
Route #3 Box 3630, Myton UT 84052	(435) 646-3721		Eight Mile Flat		
4. Location of Well (Report location clearly and in accordance with			11. Sec., T., R., M., or Blk. as	nd Survey or Area	
At surface SW/SE 660' FSL 1980' FEL 4430915	5Y 40.02543				
At proposed prod. zone 591031	ex -169,93314		SW/SE Sec. 18, T98	S R18E	
14. Distance in miles and direction from nearest town or post office*			12. County or Parish	13. State	
Approximatley 20.2 miles southeast of Myton, Utah			Uintah	UT	
15. Distance from proposed* location to nearest property or lease line, ft.	16. No. of Acres in lease	17. Spacin	ng Unit dedicated to this well		
(Also to nearest drig. unit line, if any) Approx. 660 t/lse, NA t/unit	1,717.32		40 Acres		
18. Distance from proposed location*	19. Proposed Depth	20. BLM/E	BIA Bond No. on file		
to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 2640'	6500'	#4	4488944		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will sta	rt*	23. Estimated duration		
5122' GL	3rd Quarter 2004		Approximately seven (7) days from spur	i to rig release.	
	24. Attachments				
The following, completed in accordance with the requirements of Onshor	e Oil and Gas Order No.1, shall be att	ached to this	s form:	·	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	Item 20 above).  5. Operator certific	ation. specific info	ormation and/or plans as may		
25. Signature	Name (Printed/Typed) Mandie Crozier	·	Date	110/11	
Title Careful	, ivalidie Oložiel		· 3	17/07	
Regulatory Specialist	al		1		
Title Regulatory Specialist  Approved by (Signature)  Title Regulatory Specialist  Approved by (Signature)  Title Regulatory Specialist  Approved by (Signature)	Name (Printed/Typed) BRADLEY	A. HILL	Date	 3-23-04	
Title Parlon 18	BNVIRONMENTALS	CIENTIS	T III		
Application approval does not warrant or certify the the applicant holds le operations thereon.  Conditions of approval, if any, are attached.		the subject l	lease which would entitle the ap	plicant to conduct	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

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# T9S, R18E, S.L.B.&M.

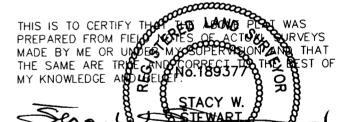


→ = SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW)

# INLAND PRODUCTION COMPANY

WELL LOCATION, FEDERAL 15-18-9-18, LOCATED AS SHOWN IN THE SW 1/4 SE 1/4 OF SECTION 18, T9S, R18E, S.L.B.&M. UINTAH COUNTY, UTAH.



TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501

( · = = /	
SCALE: 1" = 1000'	SURVEYED BY: D.J.S.
DATE: 10-16-03	DRAWN BY: J.R.S.
NOTES:	FILE #

# INLAND PRODUCTION COMPANY FEDERAL #15-18-9-18 SW/SE SECTION 18, T9S, R18E UINTAH COUNTY, UTAH

# ONSHORE ORDER NO. 1

# **DRILLING PROGRAM**

# 1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

# 2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta 0' - 1640' Green River 1640' Wasatch 5580'

# 3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Green River Formation 1640' - 6500' - Oil

# 4. PROPOSED CASING PROGRAM

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Please refer to the Monument Butte Field SOP. See Exhibit "C".

# 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

# 7. <u>AUXILIARY SAFETY EQUIPMENT TO BE USED:</u>

Please refer to the Monument Butte Field SOP.

# 8. TESTING, LOGGING AND CORING PROGRAMS:

Please refer to the Monument Butte Field SOP.

### 9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

The anticipated maximum bottom hole pressure is 2000 psi. It is not anticipated that abnormal temperatures will be encountered.

# 10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

Please refer to the Monument Butte Field SOP.

# INLAND PRODUCTION COMPANY FEDERAL #15-18-9-18 SW/SE SECTION 18, T9S, R18E UINTAH COUNTY, UTAH

# ONSHORE ORDER NO. 1

# MULTI-POINT SURFACE USE & OPERATIONS PLAN

# 1. EXISTING ROADS

See attached Topographic Map "A"

To reach Inland Production Company well location site Federal #15-18-9-18 located in the SW 1/4 SE 1/4 Section 18, T9S, R18E, Uintah County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.6 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly along Hwy 53 - 11.7 miles  $\pm$  to it's junction with an existing road to the southeast; proceed southeasterly -3.6 miles  $\pm$  to it's junction with an existing road to the northwest; proceed northwesterly -1.8 miles  $\pm$  to it's junction with an existing road to the southeast; proceed southeasterly -1.0 miles  $\pm$  to it's junction with an existing road to the southwest; proceed southwesterly -0.5 miles  $\pm$  to it's junction with the beginning of the proposed access road; proceed westerly and then northwesterly along the proposed access road -2.870' + to the proposed well location.

# 2. PLANNED ACCESS ROAD

See Topographic Map "B" for the location of the proposed access road.

# 3. <u>LOCATION OF EXISTING WELLS</u>

Refer to Exhibit "B".

# 4. <u>LOCATION OF EXISTING AND/OR PROPOSED FACILITIES</u>

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

# 5. LOCATION AND TYPE OF WATER SUPPLY

Please refer to the Monument Butte Field SOP. See Exhibit "A".

### 6. SOURCE OF CONSTRUCTION MATERIALS

Please refer to the Monument Butte Field SOP.

### 7. METHODS FOR HANDLING WASTE DISPOSAL

Please refer to the Monument Butte Field SOP.

# 8. ANCILLARY FACILITIES

Please refer to the Monument Butte Field SOP.

# 9. WELL SITE LAYOUT

See attached Location Layout Diagram.

# 10. PLANS FOR RESTORATION OF SURFACE

Please refer to the Monument Butte Field SOP.

# 11. SURFACE OWNERSHIP - Bureau Of Land Management

# 12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. MOAC Report #03-82, 1/12/04. Paleontological Resource Survey prepared by, Wade E. Miller, 7/28/03. See attached report cover pages, Exhibit "D".

Inland Production Company requests a 50' ROW for the Federal #15-18-9-18 to allow for construction of a 6" gas gathering line, and a 3" poly fuel gas line. Both lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

Inland Production Company also requests a 50' ROW be granted for the Federal #15-18-9-18 to allow for construction of a 3" steel water injection line and a 3" poly water return line. Refer to Topographic Map "C." For a ROW plan of development, please refer to the Monument Butte Field SOP.

Water Disposal

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Inland's secondary recovery project.

Water not meeting quality criteria, is disposed at Inland's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

### Reserve Pit Liner

Please refer to the Monument Butte Field SOP.

### Location and Reserve Pit Reclamation

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, to the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

ShadscaleAtriplex confertifolia4 lbs/acreScarlet globmallowSphaeralcea conccinea4 lbs/acreGalleta grassHilaria jamesii4 lbs/acre

# **Details of the On-Site Inspection**

The proposed Federal #15-18-9-18 was on-sited on 7/23/03. The following were present; Brad Mecham (Inland Production), Byron Tolman (Bureau of Land Management), and SWCA representatives. Weather conditions were clear @ 90 degrees.

### *13*. LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

# <u>Representative</u>

Name:

Brad Mecham

Address:

Route #3 Box 3630

Myton, UT 84052

Telephone:

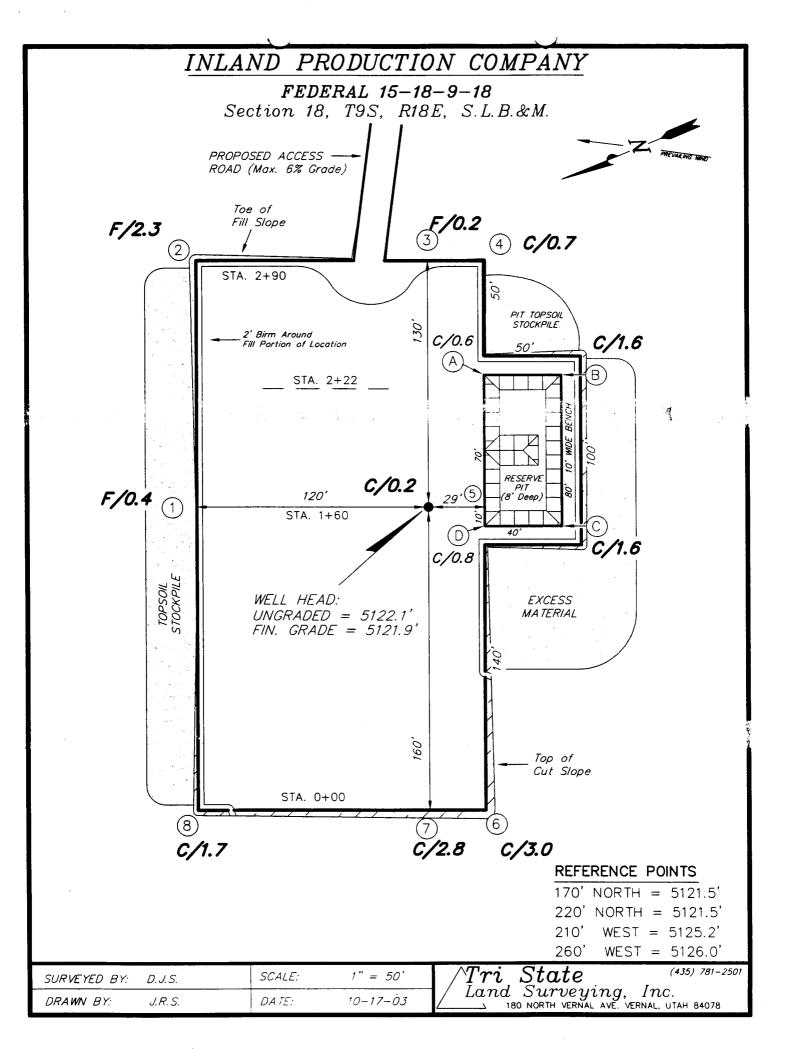
(435) 646-3721

# Certification

Please be advised that INLAND PRODUCTION COMPANY is considered to be the operator of well #15-18-9-18 SW/SE Section 18, Township 9S, Range 18E: Lease U-39714 Uintah County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4488944.

I hereby certify that the proposed drillsite and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Inland Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

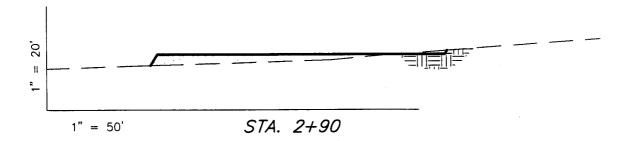
Mandie Crozier Regulatory Specialist

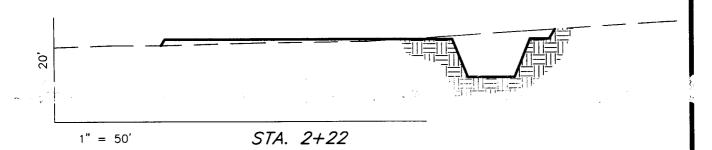


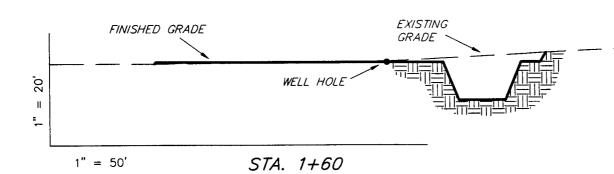
# INLAND PRODUCTION COMPANY

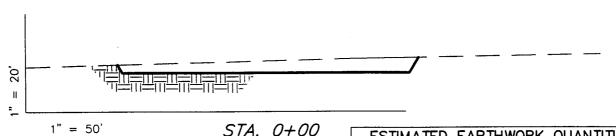
# CROSS SECTIONS

# FEDERAL 15-18-9-18









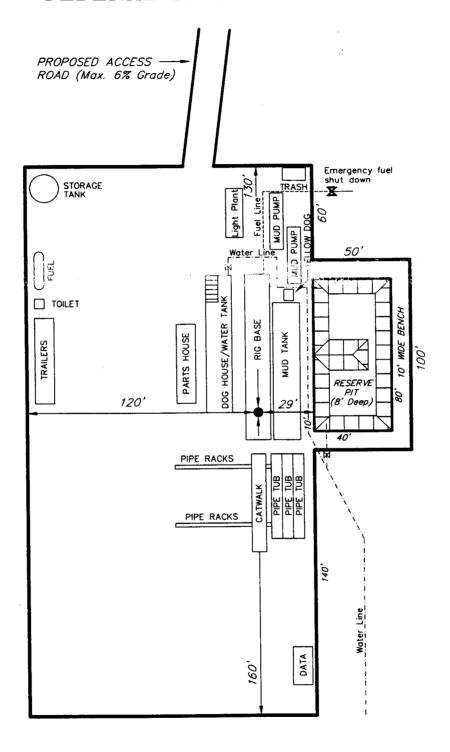
NOTE: UNLESS OTHERWISE NOTED ALL CUT/FILL SLOPES ARE AT 1.5:1 ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	860	860	Topsoil is not included	0
PIT	640	0	in Pad Cut	640
TOTALS	1,500	860	890	640

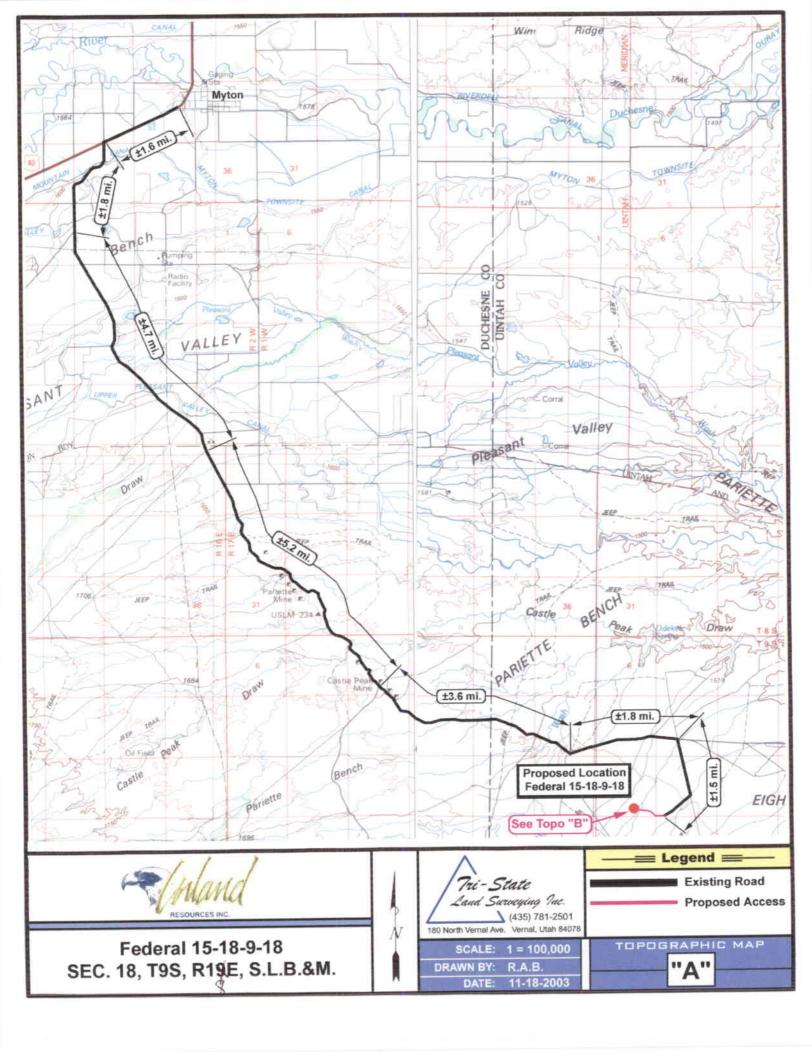
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DRAWN BY:	J.R.S.	DA TE:	10-17-03	4

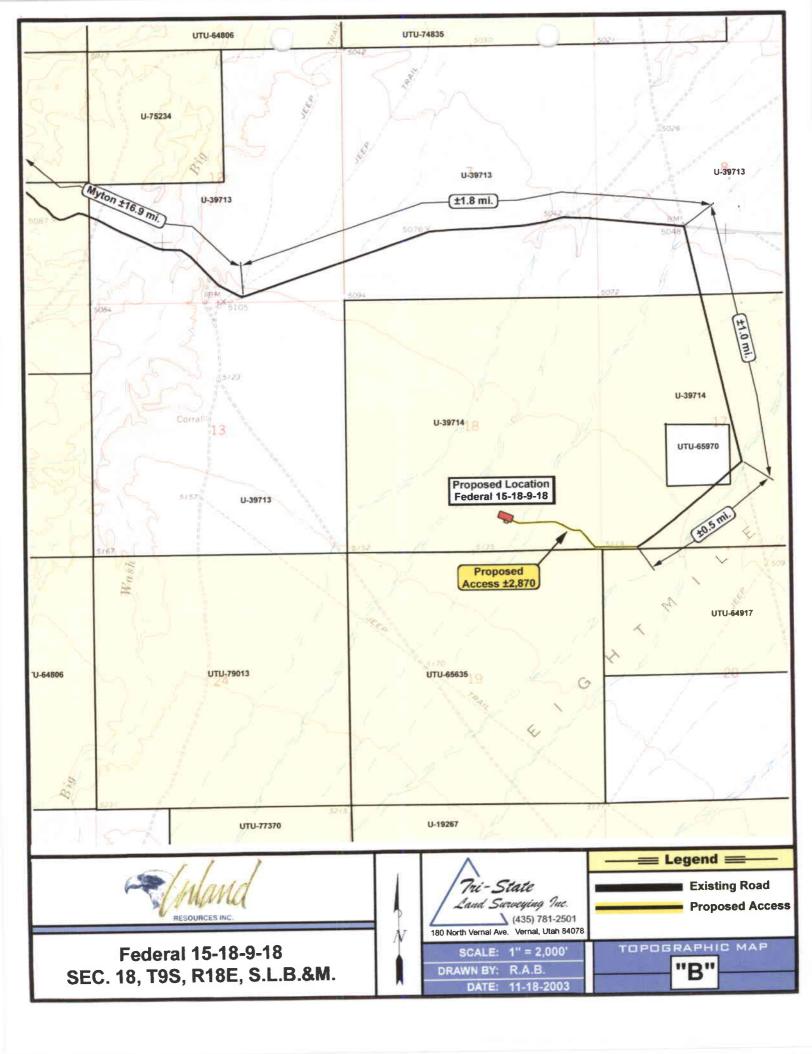
# INLAND PRODUCTION COMPANY

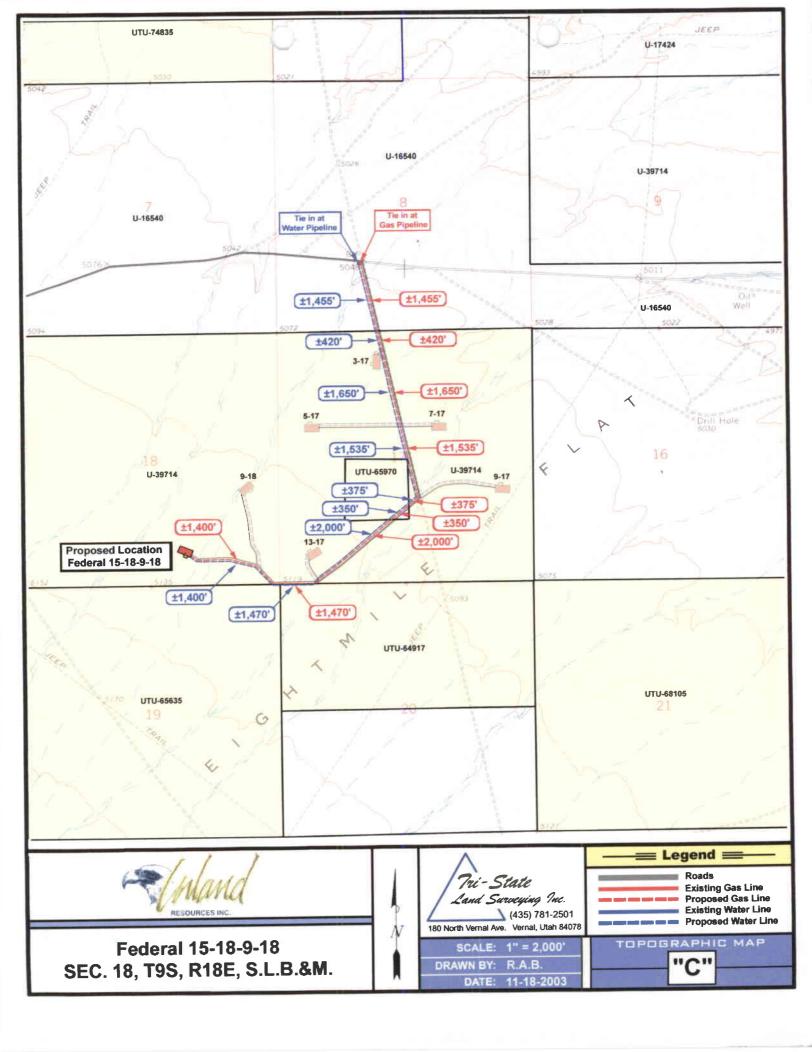
TYPICAL RIG LAYOUT
FEDERAL 15-18-9-18

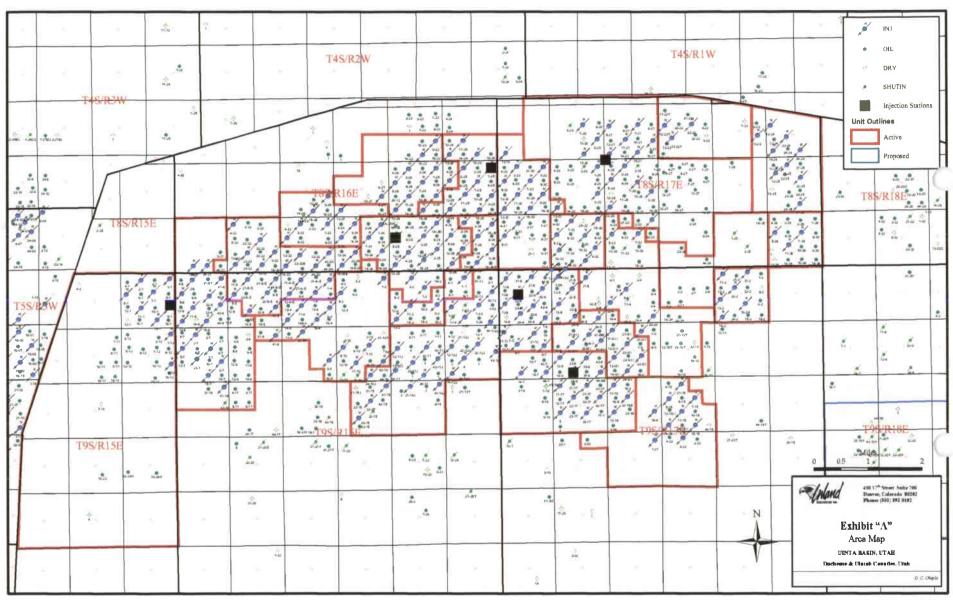


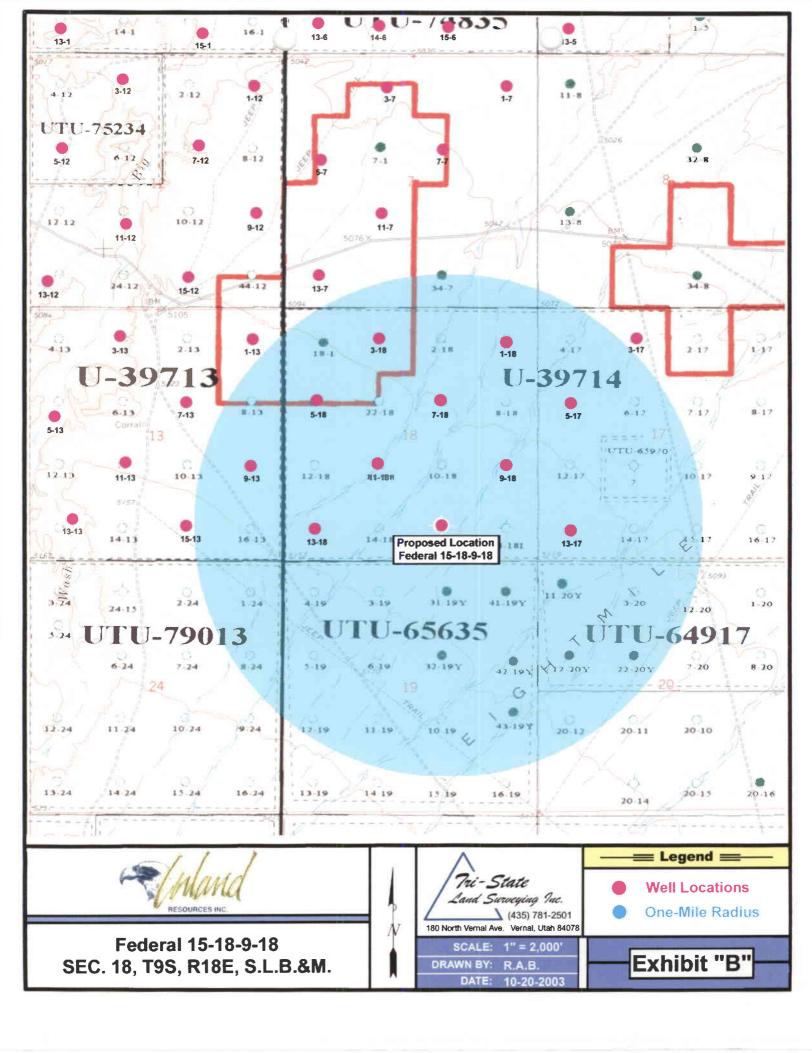
SURVEYED BY:	D. J. S.	SCALE:	1" = 50'	/Tri State (435) 781-2501
DRAWN BY:	J.R.S.	DATE:	10-17-03	Land Surveying, Inc.  180 NORTH VERNAL AVE. VERNAL, UTAH 84078





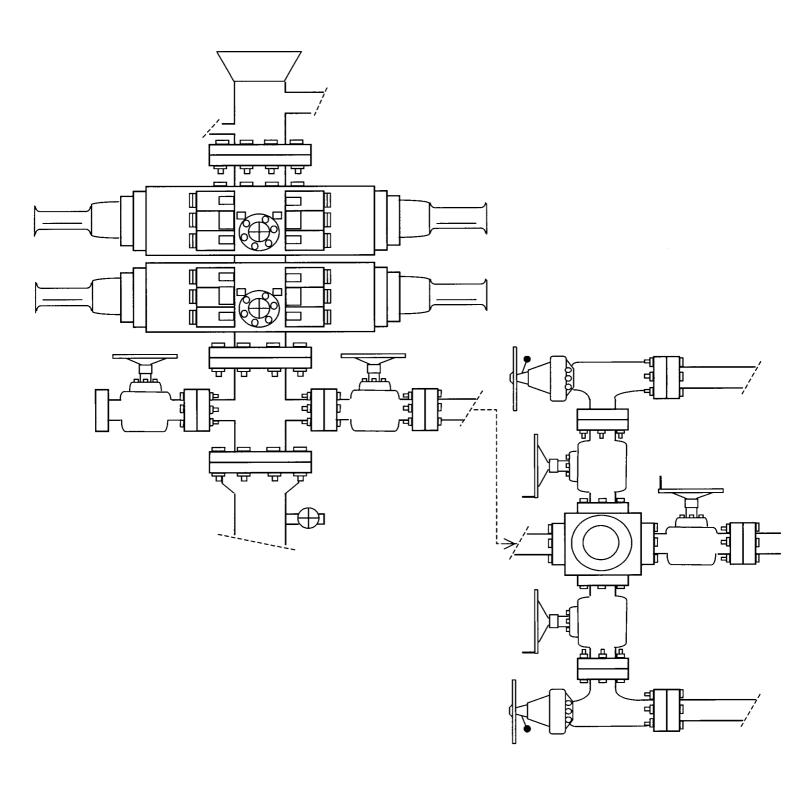






# 2-M SYSTEM

# Blowout Prevention Equipment Systems



**EXHIBIT C** 

CULTURAL RESOURCE INVENTORY OF INLAND PRODUCTIONS' PARCEL IN T 9 S, R17 E, SEC. 13, 14, 15, 23, & 24 AND T 9 S, R 18 E, SEC. 18 & 19, DUCHESNE AND UINTAH COUNTIES, UTAH Exhibit "D"

Page 1

BY:

Katie Simon and Keith R. Montgomery

Prepared For:

Bureau of Land Management Vernal Field Office

Prepared Under Contract With:

Inland Production 2507 Flintridge Place Fort Collins, CO 80521

Prepared By:

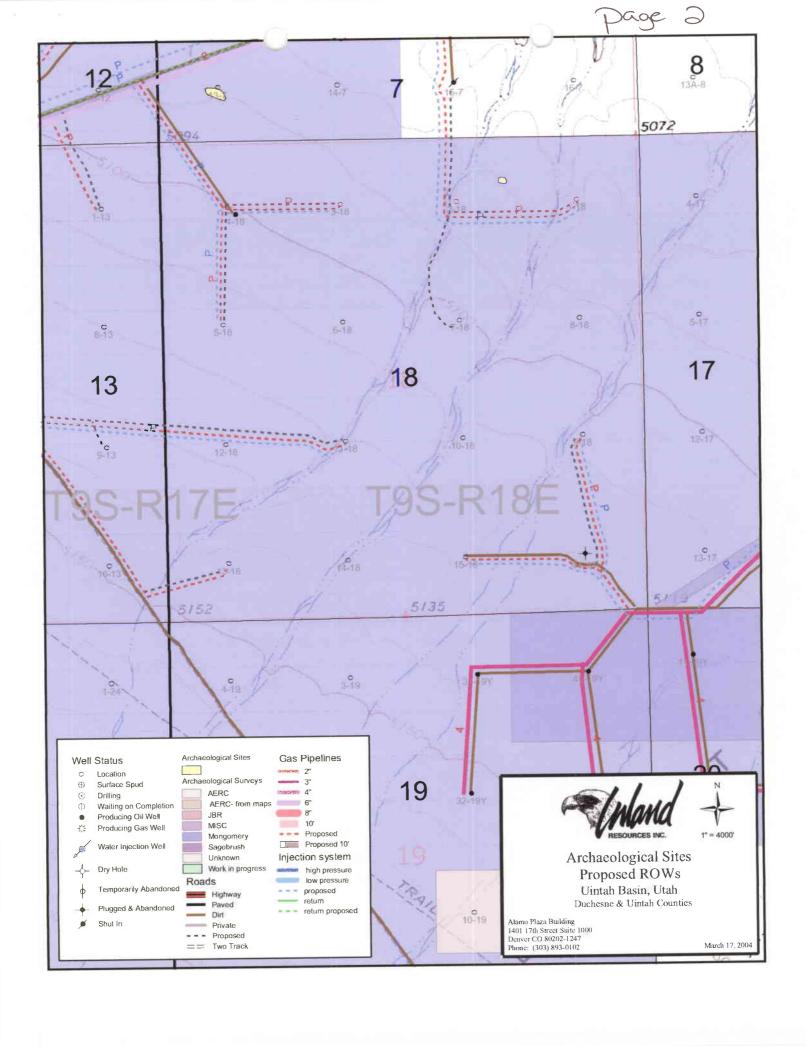
Montgomery Archaeological Consultants P.O. Box 147 Moab, Utan 84532

MOAC Report No. 03-82

January 12, 2004

United States Department of Interior (FLPMA)
Permit No. 03-UT-60122

State of Utah Antiquities Project (Survey)
Permit No. U-03-MQ-0750b



# INLAND RESOURCES, INC.

# PALEONTOLOGICAL FIELD SURVEY OF PROPOSED PRODUCTION DEVELOPMENT AREAS, DUCHESNE AND UINTAH COUNTIES, UTAH

(Section 35, T 8 S, R 17 E; Sections 13, 14, 23, 24, T 9 S, R 17 E; NE 1/4, NE 1/4, Section 15, T 9 S, R 17 E; Sections 18, 19, T 9 S, R 18 E; Sections 2, 3, 10 and western half of Section 11, T 9 S, R 15 E)

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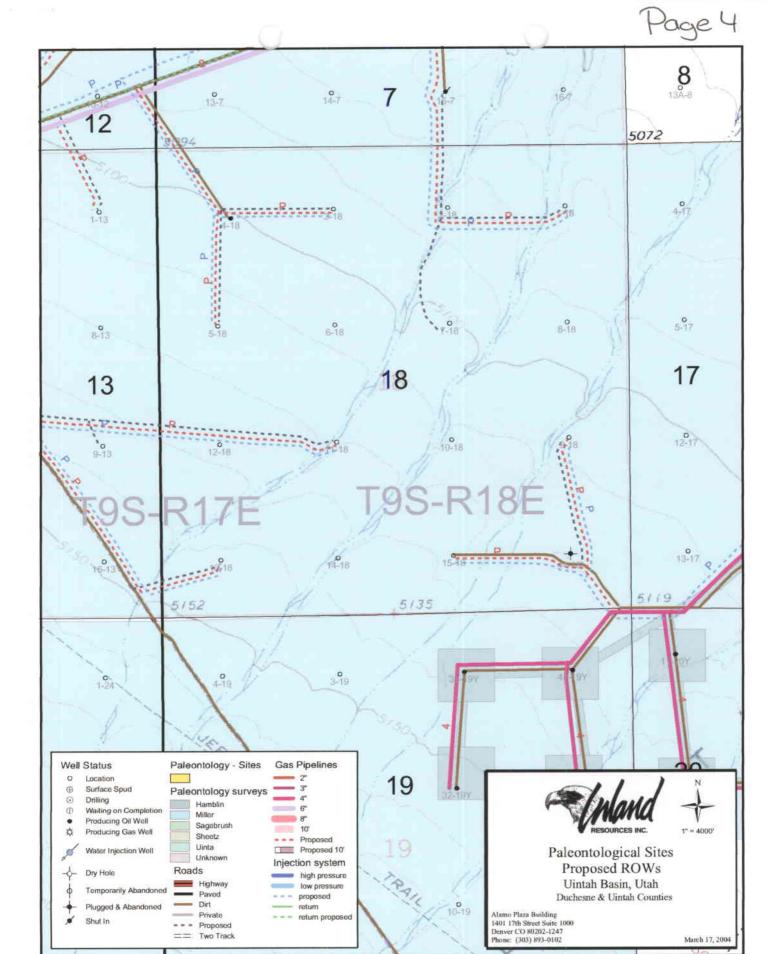
# REPORT OF SURVEY

Prepared for:

Inland Resources, Inc.

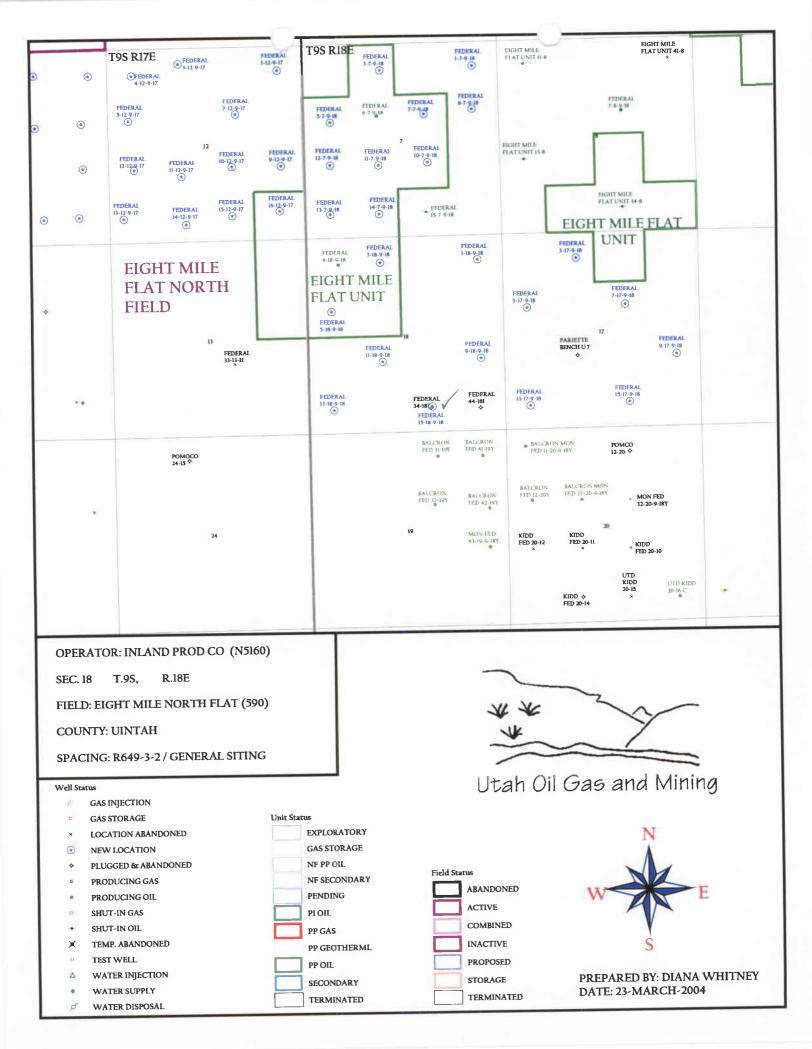
Prepared by:

Wade E. Miller Consulting Paleontologist July 28, 2003



# WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 03/22/2004	API NO. ASSIGNED: 43-047-35587
AID RECEIVED: 03/22/2001	
WELL NAME: FEDERAL 15-18-9-18	
OPERATOR: INLAND PRODUCTION ( N5160 )	
CONTACT: MANDIE CROZIER	PHONE NUMBER: 435-646-3721
PROPOSED LOCATION:  SWSE 18 090S 180E  SURFACE: 0660 FSL 1980 FEL  BOTTOM: 0660 FSL 1980 FEL  UINTAH  8 MILE FLAT NORTH ( 590 )  LEASE TYPE: 1 - Federal  LEASE NUMBER: U-39714  SURFACE OWNER: 1 - Federal  PROPOSED FORMATION: GRRV	INSPECT LOCATN BY: / /  Tech Review Initials Date  Engineering  Geology  Surface  LATITUDE: 40.02543
COALBED METHANE WELL? NO	LONGITUDE: 109.93314
RECEIVED AND/OR REVIEWED:  Plat Bond: Fed[1] Ind[] Sta[] Fee[] (No. 4488944 )  Potash (Y/N)  N Oil Shale 190-5 (B) or 190-3 or 190-13  Water Permit (No. MUNICIPAL )  RDCC Review (Y/N) (Date: )  Nn Fee Surf Agreement (Y/N)	LOCATION AND SITING:  R649-2-3.  Unit  R649-3-2. General
SOP, Soperate file:  STIPULATIONS:  1- Federal approve  2- Spacing Stip	





Department of Natural Resources

Division of Oil, Gas & Mining

ROBERT L. MORGAN Executive Director

LOWELL P. BRAXTON
Division Director

March 23, 2004

Inland Production Company Rt. #3, Box 3630 Myton, UT 84052

Re:

Federal 15-18-9-18 Well, 660' FSL, 1980' FEL, SW SE, Sec. 18, T. 9 South, R. 18 East, Uintah County, Utah

# Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-35587.

Sincerely,

John R. Baza Associate Director

pab Enclosures

cc: Uintah County Assessor

Bureau of Land Management, Vernal District Office

Operator:	Inland Production Company			
Well Name & Number	iber Federal 15-18-9-18			
API Number:	43-047-			
Lease:	U-3971	4		
Location: SW SE	Sec. 18	<b>T.</b> 9 South	<b>R.</b> 18 East	

# **Conditions of Approval**

# 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

# 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dan Jarvis at (801) 538-5338

# 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.



# Office of the Secretary of State

The undersigned, as Secretary of State of Texas, does hereby certify that the attached is a true and correct copy of each document on file in this office as described below:

Newfield Production Company Filing Number: 41530400

Articles of Amendment

September 02, 2004

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on September 10, 2004.





Secretary of State

# ARTICLES OF AMENDMENT TO THE ARTICLES OF INCORPORATION OF INLAND PRODUCTION COMPANY

In the Office of the Secretary of State of Texas

SEP 02 2004

Corporations Section

Pursuant to the provisions of Article 4.04 of the Texas Business Corporation Act (the "TBCA"), the undersigned corporation adopts the following articles of amendment to the articles of incorporation:

# ARTICLE 1 - Name

The name of the corporation is Inland Production Company.

# ARTICLE 2 - Amended Name

The following amendment to the Articles of Incorporation was approved by the Board of Directors and adopted by the shareholders of the corporation on August 27, 2004.

The amendment alters or changes Article One of the Articles of Incorporation to change the name of the corporation so that, as amended, Article One shall read in its entirety as follows:

"ARTICLE ONE - The name of the corporation is Newfield Production Company."

ARTICLE 3 - Effective Date of Filing

This document will become effective upon filing.

The holder of all of the shares outstanding and entitled to vote on said amendment has signed a consent in writing pursuant to Article 9.10 of the TBCA, adopting said amendment, and any written notice required has been given.

IN WITNESS WHEREOF, the undersigned corporation has executed these Articles of Amendment as of the 1<sup>st</sup> day of September, 2004.

INLAND RESOURCES INC.

Susan G. Riggs, Treasurer



# United States Department of the Interior



BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, UT 84145-0155 http://www.blm.gov

IN REPLY REFER TO: 3106 (UT-924)

September 16, 2004

# Memorandum

To:

Vernal Field Office

From:

Acting Chief, Branch of Fluid Minerals

Subject:

Merger Approval

Attached is an approved copy of the name change recognized by the Utah State Office. We have updated our records to reflect the merger from Inland Production Company into Newfield Production Company on September 2, 2004.

Milas Llouters

Michael Coulthard Acting Chief, Branch of Fluid Minerals

# Enclosure

1. State of Texas Certificate of Registration

cc:

MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225 State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114

Teresa Thompson Joe Incardine Connie Seare

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•								
	TIMOY							•
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	065914	16539	63073B	73520A		76808		
		16544	63073D	74108		76813		•
		17036 17424	63073E	74805		76954	63073X	
		18048	63073O	74806		76956	63098A	
•	UTU-	18399	64917 64379	74807		77233	68528A	
	010-	19267	64380	74808		77234	72086A	
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	03563	30096	64805	74390		77337	73520X	
	03563A	30103	64806	74391 74392		77338	74477X	
	04493	31260	64917	74392 74393		77339	75023X	
٠	05843	33992	65207	74393 74398		77357	76189X	
	07978	34173	65210	74398 74399		77359 77365	76331X	
	09803	34346	65635	74400		77369	76788X 77098X	
	017439B	36442	65967	74404		77370	77098X 77107X	
	017985	36846	65969	74405		77546	77107X 77236X	•
	017991	38411	65970	74406		77553·	77230X 77376X	
	017992	38428	66184	74411		77554	78560X	
	018073	38429	66185	74805		78022	79485X	
	019222	38431	66191	74806		79013	79641X	
	020252	39713	67168	74826	-	79014	80207X	
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	020254	40026	67208	74835		79016	, 525 57.2	•
	020255	40652	67549	74868		79017		
	020309D	40894	67586	74869		79831		
	022684A	41377	67845	74870		79832		
	027345	44210	68105	74872		79833 <sup>,</sup>		
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	035521	44430	68618	75036		79834		
	035521A	45431	69060	75037		80450		
	038797	47171	69061	75038		80915		•
	058149	49092	69744	75039		81000		
	063597A	49430	70821	75075				
	075174	49950	72103	75078			•	
	096547 096550	50376	72104 72105	75089				
	090330	50385 50376	72105 72106	75090				
		50750	72106	75234				
	10760	51081	72107 72108	75238			•	
	11385	52013		76239				
	13905	52013 52018	73086 73087	76240				
	15392	58546		76241				
	13374	J0J4U	73807	76560				
•								
		•						
							•	

# **OPERATOR CHANGE WORKSHEET**

007

Change of Operator (Well Sold)

1. GLH 2. CDW

3. FILE

Designation of Agent/Operator

# X Operator Name Change

# Merger

The operator of the well(s) listed below has changed, effective:			ive:	9/1/2004				]	
FROM: (Old Operator):			TO: ( New Operator):				1		
N5160-Inland Production Company				N2695-Newfield Production Company					
Route 3 Box 3630					Box 3630				
Myton, UT 84052				Myton,	UT 84052				
Phone: 1-(435) 646-3721				Phone: 1-(435)	646-3721				j
CA	No.			Unit:					
WELL(S)									
NAME	SEC	TWN	RNG	API NO	ENTITY		WELL	WELL	
					NO	TYPE	TYPE	STATUS	+
FEDERAL 2-4-9-18				4304735589	14485	Federal	OW	DRL	K
FEDERAL 3-4-9-18				4304735590		Federal	OW	APD	K
FEDERAL 5-4-9-18				4304735591		Federal	ow	APD	K
FEDERAL 6-4-9-18				4304735592		Federal	OW	APD	K
FEDERAL 8-4-9-18	04			4304735593		Federal	OW	DRL	K
FEDERAL 10-4-9-18	04	090S	180E	4304735594	14535	Federal	OW	DRL	K
FEDERAL 12-4-9-18	04	090S	180E	4304735595		Federal	OW	NEW	K
FEDERAL 16-4-9-18	04	090S	180E	4304735596		Federal	OW	APD	K
FEDERAL 5-17-9-18	17	090S	180E	4304735561		Federal	OW	APD	K
FEDERAL 7-17-9-18	17	090S	180E	4304735562		Federal	OW	APD	K
FEDERAL 9-17-9-18	17	090S	180E	4304735563		Federal	OW	APD	K
FEDERAL 13-17-9-18	17	090S	180E	4304735564		Federal	OW	APD	K
FEDERAL 15-17-9-18	17	090S	180E	4304735565		Federal	ow	APD	K
FEDERAL 1-18-9-18	18	090S	180E	4304735580		Federal	ow	APD	K
FEDERAL 3-18-9-18	18	090S	180E	4304735581		Federal	ow	APD	K
FEDERAL 5-18-9-18	18	090S	180E	4304735582		Federal	ow	APD	K
FEDERAL 9-18-9-18	18	090S	180E	4304735583		Federal	ow	APD	K
FEDERAL 11-18-9-18	18	090S	180E	4304735584		Federal	ow	APD	K
FEDERAL 13-18-9-18	18	090S	180E	4304735585		Federal	ow	APD	K
FEDERAL 15-18-9-18	18	090S	180E	4304735587		Federal	ow	APD	K
				<u></u>			<u> </u>		

# **OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

(R649-8-10) Sundry or legal documentation was received from the FORMER operator on: 9/15/2004
 (R649-8-10) Sundry or legal documentation was received from the NEW operator on: 9/15/2004

3. The new company was checked on the Department of Commerce, Division of Corporations Database on:

2/23/2005

4. Is the new operator registered in the State of Utah:

YES Business Number:

755627-0143

5. If NO, the operator was contacted contacted on:

a. (R649-9-2)Waste Management Plan has been received on:	IN PLACE
o. Inspections of LA PA state/fee well sites complete on:	waived
The Land Weller The DI Monda	the RIA has approved the merger name change.
Federal and Indian Lease Wells: The BLM and or operator change for all wells listed on Federal or Indian l	or the BIA has approved the merger, name change,
or operator change for all wells listed on redetal of findian i	reases on.
Federal and Indian Units:	
The BLM or BIA has approved the successor of unit oper	rator for wells listed on: n/a
	A- (IICA II).
Federal and Indian Communization Agreeme The BLM or BIA has approved the operator for all wells	listed within a CA on:
0. Underground Injection Control ("UIC") T	The Division has approved UIC Form 5, Transfer of Authority to
Inject, for the enhanced/secondary recovery unit/project fo	or the water disposal well(s) listed on: $\frac{2/23/2005}{}$
•	
ACEA ENTERNA	
OATA ENTRY: Changes entered in the Oil and Gas Database on:	2/28/2005
Changes have been entered on the Monthly Operator Cha	ange Spread Sheet on: 2/28/2005
Bond information entered in RBDMS on:	2/28/2005
Fee/State wells attached to bond in RBDMS on:	2/28/2005
. Injection Projects to new operator in RBDMS on:	2/28/2005
. Receipt of Acceptance of Drilling Procedures for APD/Ne	ew on: waived
FEDERAL WELL(S) BOND VERIFICATION:	
Federal well(s) covered by Bond Number:	UT 0056
. redetal well(s) covered by Bolid Numero	
NDIAN WELL(S) BOND VERIFICATION:	
. Indian well(s) covered by Bond Number:	61BSBDH2912
TO COLUMN WELL (C) DOND WEDIELCATIO	ON.
FEE & STATE WELL(S) BOND VERIFICATION (R649-3-1) The NEW operator of any fee well(s) listed co	DIV: Diversed by Bond Number 61BSBDH2919
. (R649-3-1) The NEW operator of any fee wen(s) fished ee	
2. The FORMER operator has requested a release of liability	from their bond on:n/a*
The Division sent response by letter on:	n/a
NOTIFICATION.	
LEASE INTEREST OWNER NOTIFICATION:  (R649-2-10) The FORMER operator of the fee wells has be	: been contacted and informed by a letter from the Division
<ol> <li>(R649-2-10) The FORMER operator of the ree wells has been of their responsibility to notify all interest owners of this cl</li> </ol>	hange on: n/a
of their responsibility to notify an interest emission of	
COMMENTS:	A New Sald Production Company, wassived 2/23/05
Bond rider changed operator name from Inland Production C	Company to Newfield Production Company - received 2/23/05

IN PLACE

Form 3160-3 (September 2001)				OM	RM APPROVED B No. 1004-013 s January 31, 20	6
UNITED STATES DEPARTMENT OF THE IN BUREAU OF LAND MANAC	ITERIOR			5. Lease Serial U-397		
APPLICATION FOR PERMIT TO DR		NTER		6. If Indian, All	ottee or Tribe	Name
la. Type of Work: 🔟 DRILL 🔲 REENTER	<b>\</b>				N/A	ame and No.
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other		Zone 🗖 Multi	ple Zone		nd Well No. 5-18-9-18	
2. Name of Operator  while Id Production Company				9. API Well No.	47.3	5587
3a. Address 3b. Phone No. (include area code) Route #3 Box 3630, Myton UT 84052 (435) 646-3721				10. Field and Poo Eight Mile	Flat	
Location of Well (Report location clearly and in accordance with a     At surface SW/SE 660' FSL 1980' FEL	any State requirem	ents.*)		11. Sec., T., R., M SW/SE Se	<ol> <li>or Blk. and</li> <li>tc. 18, T9S F</li> </ol>	
At proposed prod. zone  14. Distance in miles and direction from nearest town or post office*  Approximatley 20.2 miles southeast of Myton, Utah			-	12. County or Par Uintah	rish	13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 660 f/lse, NA f/unit	16. No. of Acres		17. Spacing	g Unit dedicated to 40 Acres	this well	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 2640'	Distance from proposed location* to nearest well, drilling, completed,			11A Bond No. on fil 488944	17005	l <sub>e</sub>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5122' GL	22. Approximate 3rd Quarte	date work will start 2004	art*	23. Estimated du Approximately seven (7		rig release.
The following, completed in accordance with the requirements of Onshor	24. Attachm		tached to this	form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	4.	Bond to cover to the state of t	the operation cation. specific info	ormation and/or pla		•
25. Signature Marclio Carrier		nted/Typed) Crozier			Date 3/1	9/34
Title Regulatory Specialist	-		REC	CEIVED	1	
Howard Course	Name (Pr	inted/Typed)	MAR	0 1 2005	02/2	3/200
Title Assistant Field Manager Mineral Resources	Office			L, GAS & MINII		/
Application approval does not warrant or certify the the applicant holds loperations thereon.  Conditions of approval, if any, are attached.	egal or equitable ti	le to those rights i	n the subject	lease which would	entitle the appl	icant to conduc
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it States any false, fictitious or fraudulent statements or representations as t	a crime for any po o any matter within	erson knowingly a i its jurisdiction.	nd willfully t	o make to any depa	artment or age	ncy of the Unit

\*(Instructions on reverse)



COAs Page 1 of 3 Well No.: FEDERAL 15-18-9-18

# CONDITIONS OF APPROVAL APPLICATION FOR PERMIT TO DRILL

Company/Operator: _	Newfield Production Company
Well Name & Number	r: _FEDERAL 15-18-9-18
API Number:	43-047-35587
Lease Number:	UTU - 39714
Location: SWSE	Sec. <u>18</u> TWN: <u>9S</u> RNG: <u>18E</u>
Agreement:	N/A

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

Well No.: FEDERAL 15-18-9-18

# CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Submit an electronic copy of all logs run on this well in LAS format. This submission will replace the requirement for submittal of paper logs to the BLM.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

# **DRILLING PROGRAM**

# 1. Casing Program and Auxiliary Equipment

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the base of the usable water zone, identified at  $\pm 768$  ft.

Well No.: FEDERAL 15-18-9-18

# SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

No construction or drilling shall be allowed during the burrowing owl nesting season (April 1 to Aug. 15), without first consulting the BLM biologist. If no nesting owls are found, drilling will be allowed.

Mountain Plover surveys will have to be conducted in accordance with the U.S. Fish & Wildlife Service Mountain Plover Survey Guidelines.

To reduce noise levels in the area, a hospital muffler or multi-cylinder engine shall be installed on the pumping unit.

A Right-of-Way will be required for the proposed pipeline.

FORM 3160-5 (June 1990)

# **ITED STATES** DEPARTMENT OF THE INTERIOR

Buc	lget	Burea	u No.	1004-01.	3
-			1 21	1003	

0	0	h
v	v	v

BUREAU OF L	AND MANAGEMENT	Expires: March 31, 1993	
006 SUNDRY NOTICES AND		5. Lease Designation and Serial No.	
SUNDRY NOTICES AND	UTU-39714		
Do not use this form for proposals to drill or to deep	6. If Indian, Allottee or Tribe Name		
Use "APPLICATION FO	OR PERMIT -" for such proposals	NA	
		7. If Unit or CA, Agreement Designation	
SUBMIT IN	N/A		
1. Type of Well    X Oil   Gas   Well   Other		8. Well Name and No.  FEDERAL 15-18-9-18  9. API Well No.	
2. Name of Operator		43-047-35587	
NEWFIELD PRODUCTION COMPANY		10. Field and Pool, or Exploratory Area  EIGHT MILE FLAT NORTI	
3. Address and Telephone No.	11. County or Parish, State		
111.0 2011.000,112,1001.	46-3721	11. County of Parish, State	
4. Location of Well (Footage, Sec., T., R., m., or Survey Description) 660 FSL 1980 FEL SW/SE Section	18, T9S R18E	UINTAH COUNTY, UT.	
12. CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF	ACTION	
X Notice of Intent Subsequent Report Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing  Other Permit Extension	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Newfield Production Company requsts to extend the Permit to Drill this well for one year. The original approval date was 3/23/04 (expiration 3/23/05).

Oil, Gas and

**RECEIVED** 

MAR 0 8 2005

DIV. OF OIL, GAS & MINING

14. I hereby certify that the Signed Mandie Crozier

Regulatory Specialist

Date

3/7/2005

CC: UTAH DOGM

(This space for Federal or State office use)

Conditions of approval, if any:

CC: Utah DOGM

Approved by

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious

Title

RESET

43-047-35587

API:

# Application for Permit to Drill Request for Permit Extension Validation

Validation
(this form should accompany the Sundry Notice requesting permit extension)

Well Name: Federal 15-18-9-18 Location: SW/SE Section 18, T9S R18E Company Permit Issued to: Newfield Production Compa Date Original Permit Issued: 3/23/2004	any					
The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.						
Following is a checklist of some items related to the application, which should be verified.						
If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes□No□ ♠						
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes□Nov						
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes□No						
Have there been any changes to the access route including ownership, or right- of-way, which could affect the proposed location? Yes□No						
Has the approved source of water for drilling changed? Yes□No						
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes□Not						
ls bonding still in place, which covers this proposed well? Yest No□						
Signature Curries	3/7/2005 Date					
Title: Regulatory Specialist						
Representing: Newfield Production Company						

### DIVISION OF OIL, GAS AND MINING

### **SPUDDING INFORMATION**

Name of Cor	mpany:	NEWFIEI	D PRODUCT	ION COMPANY
Well Name:		FEDERAI	<u>. 15-18-9-18</u>	
Api No:	43-047-	35587	_Lease Type:_	FEDERAL
Section_18_	_Township	0 098 Range 18E	_County	UINTAH
Drilling Con	tractor	ROSS DRILLING	RIG #_	24
SPUDDE				
	Date	09/08/05		
	Time	9:00 AM		
	How	DRY		
Drilling w	ill Comı	mence:		
Reported by		RAY HERR	ERA	
Telephone #	<u> </u>	1-435-823-1	990	
Date (	)9/08/200 <del>:</del>	5 Signed	CHD	

FORM 3160-5 (September 2001)

(Instructions on reverse)

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0135 Expires January 31,2004

CUMPBY MOTICES AND DEDORTS ON WELLS

Lease Serial No.

SUNDRY	01039/14						
abandoned we	notices and Repor his form for proposals to ell. Use Form 3160-3 (API	D) for such propos	als.	6. If Indian, Allot	6. If Indian, Allottee or Tribe Name.		
SOURWITT IN TH	aireicavesomerinst	Therear on the care	side-24	7. If Unit or CA/	Agreement, Name and/or No.		
				SUNDANCE U	•		
1. Type of Weil	Other			8. Well Name and	d No.		
Oil Well Gas Well  Name of Operator	Other			FEDERAL 15-			
Newfield Production Company				9. API Well No.	· · · · · · · · · · · · · · · · · · ·		
3a. Address Route 3 Box 3630		3b. Phone No. (include 435.646.3721	are code)	4304735587	ol, or Exploratory Area		
Myton, UT 84052 4. Location of Well (Footage, Sec	., T., R., M., or Survey Description			Monument But			
660 FSL 1980 FEL				11. County or Pa	rish, State		
SW/SE Section 18 T9S R1	8E			Uintah, UT			
a 12. CHECK	APPROPRIATE BOX(ES	S) TO INIDICATE	NATURE OF N	OTICE, OR O	THER DATA		
TYPE OF SUBMISSION			YPE OF ACTION		<del></del>		
	Acidize	Deepen	Productio	on(Start/Resume)	Water Shut-Off		
Notice of Intent	Acidize  Alter Casing	Fracture Treat	Reclama	•	Well Integrity		
Subsequent Report	Casing Repair	New Construction	Recompl	ete	X Other		
	Change Plans	Plug & Abandon		rily Abandon	Spud Notice		
Final Abandonment Notice	Convert to Injector	Plug Back	☐ Water D	isposal			
Set @ 311 KB. On 9/10/05 cf/ sk yeild. Returned 3 bb	cement with 160 sks of closes cement to pit. WOC.	ass 'G' W 3% CaC	L2 + 1/4# SK CE	iio- riake iviixet	и (у 73.6 рру / 1.17		
I hereby certify that the foregoing	is true and correct	Title					
Name (Printed/ Typed) Justin Crum		Drilling For	eman				
Signature	~ //	Date		**			
Cestu	Chum			×			
A Single	THIS SPACE TO	DREEDER VEOR	STATEORER	E (SE LOS	ing sign and the		
		т	itle	T .	Pate		
Approved by  Conditions of approval, if any, are attacertify that the applicant holds legal or	equitable title to those rights in the sub	warrant or	office	<u></u>			
which would entitle the applicant to co Title 18 U.S.C. Section 1001 and Title	nduct operations thereon.		and willfully to make	to any department or	agency of the United		
States any false, fictitious and fraudule	nt statements or representations as to a	ny matter within its jurisdic	tion	DF.	<del>CEIVED</del>		

### NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

			8 5/8	CASING SE	TAT	311.09	-		
LAST CASIN	IG 8 5/8"	SET	AT 31 <u>1'</u>		OPERATOR	₹	Newfield F	roduction (	Company
DATUM			· · · · · · · · · · · · · · · · · · ·			· Federal 15		Toduction	Sompany
DATUM TO			· <del></del>				Monumen	t Butte	
DATUM TO	BRADENHE	- AD FLANGE				_	<del> </del>	Ross Rig #	24
TO DRILLER	303'	LOGG	ER	<del></del>					
HOLE SIZE									
LOG OF CA	SING STRIN	IG:				· · · · ·			
PIECES	OD	ITEM -	MAKE - DESC	RIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH
9									·
		40.22' sh jt'							
		WHI - 92 cs	g head				8rd	Α	0.95
7	8 5/8"	Maverick S	T&C csg		24#	J-55	8rd	Α	301.98
*****			GUIDE	shoe			8rd	Α	0.9
CASING INV	ENTORY B	AL.	FEET	JTS	TOTAL LEN	GTH OF ST	RING		301.09
TOTAL LENG	STH OF ST	RING	301.09	7	LESS CUT	OFF PIECE			2
LESS NON C			1.85		PLUS DATU	M TO T/CUT	OFF CSG		12
PLUS FULL	JTS. LEFT (	DUT	0		CASING SE	T DEPTH			311.09
- 10-11-11-1	TOTAL		299.24	7	-lì	,			
TOTAL CSG	DEL. (W/O	THRDS)	299.24	7	COMPAR	RE ,			
TIMING			1ST STAGE		4				
BEGIN RUN			SPUD	<u> </u>					
CSG. IN HOL	**************************************				Bbls CMT C				
BEGIN CIRC									FT STROKE
BEGIN PUMI					DID BACK P		EHOLD? _	N/A	
BEGIN DSPL					BUMPED PL	UG TO	570		PSI
PLUG DOWN		1			1	<b>.</b> .			
CEMENT US			<del></del>	CEMENT CC		B. J.			
	# SX	01 11011			PE & ADDITIV	· · · · · · · · · · · · · · · · · · ·			<u>-</u>
1	160	Class "G" w	/ 2% CaCL2 +	1/4#/sk Cello-	Flake mixed @	) 15.8 ppg 1	.17 cf/sk yield	<u> </u>	
						<del></del>			
CENTRALIZE	ED 9 CCDA	I DI AC	PENACNIT			CLIONALNAN	E 6 0D40IN		
CENTRALIZE				2		SHOW MAK	E & SPACIN	G	
Ochu alizelS	- wildale III	at, top seco	and & third for	<u>J</u>					
		······································						<del></del>	

DATE <u>9/10/2005</u>

COMPANY REPRESENTATIVE Justin Crum

RT. 3 BOX 3639	_
MYTON, UT 84052	_

	₹ UTAH	TAH				R: NEWFIELD PRODUCTION COMPANY S: RT. 3 BOX 3630				CPERATOR ACCT. NO.	N2696
	OF OIL, GAS			ALURESS.	MYTON, UT 84052						
IT'	Y ACTION	FORM -FORM	<b>1</b> 6		Me soid,						
							WEI 10	CATION		SPUO	EMECTME
41	CURRENT	HEV	API SUMBER	WELL NAME	40	sc	TP	9G	COUNTY	CATE	CATE
€	EVITIV NO.	ENTITY NO.						1	ļ	country to F	9/15/05
	99999	14844	43-047-35450	FEDERAL 7-7-9-18	SWNE	7_	98	18E	UINTAH	09/08/05	1 1/10/05
				1							
	SWEATS.	SRRV	Sun	dance							
	`		, ,							SPVO	EFFECTIVE
СЯ	CURRENT	HEW	API YUMBER	WELL NAME	00	SC Y	TP	RG	COLINTY	DATE	CATE
Æ	ENTITY '20.	מצייחדוק.			<del>                                     </del>						9/15/05
	00000	14844	43-047-35587	FEDERAL 15-18-9-18	SWSE	18	98	18E	UINTAH	09/08/05	1/0/00
	99999		1								
200	CANAIGHUE:	3RRU	Lynn	lance				•			
	_	J1 = 1 = 0	750.100						<del></del>	SPLD	EFFECTNE
nc.ul	CURRENT	MEM	API YUMBER	WELL HAME			TP	CCATION	COUNTY	DATE	
ΣĒ	ENTITY NO.	ENTITY NO.			ao	- 8C	<del>  "-</del>	<del> </del>	- Count		9/10/00
				FFDFDAL 4 7 0 49	NENE	7	95	18E	UINTAH	09/09/05	9/15/05
3	99999	14844	43-047-35447	FEDERAL 1-7-9-18	HENE	<u> </u>					
L 3 C:	CEPASTITS:	GRRV	لم الم	0.01							
		Spr	Luna	ance							
		· · · · · · · · · · · · · · · · · · ·	API SIMBER	WELLIAME				LOCATION		gPUD ≅TAD	EFFECTIVE DATE
:::::::	CURRENT	I NEW	-APT ALMINDEN		ÇQ	sc	₹P	RG	CCUNTY		10/
	CHIPTY 'IO	ENTATY NO.									1 41/4
-=	OI, ALLUHS	ENTATY NO.				47	06	18F	HATMEL	09/12/05	9/15/05
	99999	ENTSTY NO. 14844	43-047-35561	FEDERAL 3-17-9-18	NENW	17	98	18E	HATMU	09/12/05	1/15/05
в		14844			NENW	17	98	18E	HATNIU	09/12/05	1/15/05
в	99999				NENW	17	98	18E	HATUN	09/12/05	1 7/0/00
в	99999	14844 GRW	Sunda	nice	NENW	17		18E		SPUO	GFFECTIVE
B 1:40	99999 OLEMENTS	14844 GREU			NENW	17   sc			COUNTY		EFFECTIVE DATE
B L: 40	39999 99999	14844 GRW	Sunda	nice	QQ.	sc	WELL TP	LCCATION	COUNTY	SPUO DATE	EFFECTIVE DATE
HO1:	99999 OLDHENI'S CURRENT ENTITY NO.	14844 GREU	Sunda	nice		sc	WETT	LCCATION	COUNTY	SPUO	GFFECTIVE
B L:40 POH DOE	99999  OLIDIENTS  CURRENT ENTTYNO.  99999	14844 G-PPU NEW BIMITY NO. 14844	Api NUMBER 43-047-35580	WELLNAME FEDERAL 5-17-9-18	QQ.	sc	WELL TP	LCCATION	COUNTY	SPUO DATE	EFFECTIVE DATE
B LL4C	99999  OLIDIENTS  CURRENT ENTTYNO.  99999	14844 C-PPU ABW BITTYAG	Api NUMBER 43-047-35580	WELLNAME FEDERAL 5-17-9-18	QQ.	sc	WELL TP	LCCATION	COUNTY	SPUO DATE	EFFECTIVE DATE
B L:40 POH DOE	99999  OLIDIENTS  CURRENT ENTTYNO.  99999	14844 G-PPU NEW BIMITY NO. 14844	Api NUMBER 43-047-35580	FEDERAL 5-17-9-18	QQ.	sc	WELL 1P 9S	LECATION RG	COUNTY	SPUO DATE	### SERECTIVE DATE 9/15/05
Pon Pone B	99999  OLIDIENTS  CURRENT ENTTYNO.  99999	14844 GREV BITTY NO. 14844 GREV	Api NUMBER 43-047-35580	WELLNAME FEDERAL 5-17-9-18	SWANA	sc	WELL 1P 9S	LICCATION RG	COUNTY	SPU0 DATE 09/14/05 SPUD DATE	EFFECTIVE DATE  9/15/05  SFECTIVE DATE
B LISC THEN	99999 CURRENT ENTRY NO. 99999 COMMENTS:	14844  CPPU  ABW EIMITYAN  14844  CPPU  MEW ENTITY NO.	API NUMBER  43-047-35560  Second Seco	WELL NAME  FEDERAL 5-17-9-18  WELL NAME	QQ.	sc   17	WELL TP 9S	18E	COUNTY	SPUD DATE 09/14/05	### SERECTIVE DATE 9/15/05
B LL4C	99999 OLEMENTS CURRENT ENTTY NO. 99999 COMMENTS: (	14844 GREV BITTY NO. 14844 GREV	API MUMBER  43-047-35580  Sund	FEDERAL 5-17-9-18	SWAN	sc   17	WELL TP 9S	18E	COUNTY	SPU0 DATE 09/14/05 SPUD DATE	EFFECTIVE DATE  9/15/05  SFECTIVE DATE
B PORE COE B	99999 CURRENT ENTRY NO. 99999 COMMENTS:	14844  CPPU  ABW EIMITYAN  14844  CPPU  MEW ENTITY NO.	43-047-35560  43-047-35560  API NUMBER  43-013-32642	FEDERAL 5-17-9-18  Lance  WELLNAME  ASHLEY FEDERAL 16-15-9-15	SWAN	sc   17	WELL TP 9S	18E	COUNTY	SPU0 DATE 09/14/05 SPUD DATE	EFFECTIVE DATE  9/15/05  SFECTIVE DATE
B B B B	99999 CLIRRENT ENTITY NO. 99999 CONNECTE: CUTTENT ENTITY NO. 99999	14844  CPPU  ABW EIMITYAN  14844  CPPU  MEW ENTITY NO.	API NUMBER  43-047-35560  Second Seco	FEDERAL 5-17-9-18  Lance  WELLNAME  ASHLEY FEDERAL 16-15-9-15	SWAN	sc   17	WELL TP 9S	18E	COUNTY	SPU0 DATE 09/14/05 SPUD DATE	EFFECTIVE DATE  9/15/05  SFECTIVE DATE

- A Establish name estily for name of (surgle well only)
- B. Act was also aciding askly (group or unit well)
- D Relassion well from one asisting entity to a new string

E - Other (sup airin marmerin sacton)

**RECEIVED** 

SEP 1 5 2005

September 15, 2005 Production Clerk

NOTE: Use COMMENT section to eight 1944 each Action Code was selected

FORM 3160-5 (September 2001)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0135 Expires January 31,2004

Lease Serial No.

SUNDRY N	OTICES AN	D REPORTS	ON WELLS or to re-enter an
√Do not use this	form for prop	posals to drill	or to re-enter an
andoned well	Hee Form 31	160-3 (APD) fe	or such proposals

L	UTU39714	
6	. If Indian, Allottee or Tribe Name.	

á. andoned we	ell. Use Form 3160-3 ( <i>F</i>	וטר) for such proposal	<b>5.</b>		
	urjacznoczonican Pośrodkiek karoni			7. If Unit or CA/A SUNDANCE U	Agreement, Name and/or No.
1. Type of We!!  Oil Well Gas Well  Name of Operator  Newfield Production Company	Other			8. Well Name and FEDERAL 15-1	
3a. Address Route 3 Box 3630 Myton, UT 84052	Address Route 3 Box 3630 3b. Phone No. (include are code)			4304735587	l, or Exploratory Area
Location of Well (Footage, Sec., T., R., M., or Survey Description) 660 FSL 1980 FEL SW/SE Section 18 T9S R18E					e rish, State
12. CHECK	APPROPRIATE BOX	(ES) TO INIDICATE N	ATURE OF N	OTICE, OR OT	THER DATA
TYPE OF SUBMISSION		TYI	PE OF ACTION	1	
□ Notice of Intent  ☑ Subsequent Report  □ Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injector	Deepen Fracture Treat New Construction Plug & Abandon Plug Back	Reclama Recomp	lete arily Abandon	Water Shut-Off Well Integrity Other Weekly Status Report

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen direction ally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 9-18-2005 MIRU Patterson Rig # 155. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notifed of test. PU BHA and tag cement @ 265'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 5625'. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 130 jt's of 5.5 J-55, 15.5# csgn. Set @ 5606.45' / KB. Cement with 325 sks cement mixed @ 11.0 ppg & 3.43 yld. Then 450 sks cement mixed @ 14.4 ppg & 1.24 yld. With 6 bbls cement returned to pit. Nipple down Bop's. Drop slips @ 82,000 #'s tension. Release rig 10:00 pm on 9-22-05.

RECEIVED SEP 2 9 2005

DIV. OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct	Title					
Name (Printed/ Typed) Troy Zufelt	Drilling Foreman					
Signature	Date 09/22/200	05				
A CONTRACTOR OF THE PROPERTY O	(0)(4)(5/0)	iginaling (919)	EGESKIESE KRIENER			
Approved by		Title	Date			
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office				
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any p States any false, fictitious and fraudulent statements or representations as to any matter w	erson knowing vithin its jurisd	ly and willfully to ma	ake to any department or agency of the	United		

#### NEWFIELD PRODUCTION COMPANY - CASING & CEMENT PEPORT

			5 1/2	CASING SET	Fit clir @		-		
LAST CASIN	NG 8 5/8"		Set @	311'	_		Newfield I	Production (	Company
DATUM					WELL			10000001	opu.i.y
		ASING	12'	<del></del>	FIELD/PRO			t Butte	
		- AD FLANGE		<u> </u>				Patterson F	Rig # 155
TO DRILLER	5625'	Loggers T	D	5617'					
HOLE SIZE									
	-								
LOG OF CA	SING STRIN	G:		•					
PIECES	OD	ITEM -	MAKE - DESCI	RIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH
		Landing Jt							14
	SHJT	5.90 @ 372	1.21						
129	5 1/2"	ETC LT & C	casing		15.5#	J-55	8rd	Α	5548.09
		Float collar							0.6
1	5 1/2"	ETC LT&C	csg		15.5#	J-55	8rd	Α	45.11
			GUIDE	shoe			8rd	Α	0.65
CASING INV	ENTORY BA	AL.	FEET	JTS	TOTAL LEN	GTH OF STI	RING		5608.45
TOTAL LEN	GTH OF STE	RING	5608.45	130	LESS CUT	OFF PIECE		Ī	14
LESS NON	CSG. ITEMS		15.25		PLUS DATU	M TO T/CUT	OFF CSG		12
PLUS FULL	JTS. LEFT C	DUT	213.44	5	CASING SE	T DEPTH		Ī	5606.45
	TOTAL		5806.64	135	]			•	
TOTAL CSG	. DEL. (W/O	THRDS)	5806.64	135	COMPAR	RE			
TIMING			1ST STAGE	2nd STAGE	]				
BEGIN RUN	CSG.		10:30 AM	9/22/2005	GOOD CIRC	THRU JOB		Yes	
CSG. IN HO	LE		1:30 PM	9/22/2005	Bbls CMT C	IRC TO SUR	FACE	6	
BEGIN CIRC	,		1:30 PM	9/22/2005	RECIPROCA	ATED PIPE I	FOR	THRUSTROK	<u>E</u>
BEGIN PUM	PCMT		3:00 PM	9/22/2005	DID BACK P	RES. VALVI	E HOLD ? _	Yes	
BEGIN DSPI	CMT		4:50 PM	9/22/2005	BUMPED PL	LUG TO		2181	PSI
PLUG DOW	N .		5:15 PM	9/22/2005					
CEMENT US	ED			CEMENT CO	MPANY-	B. J.			
STAGE	# SX			CEMENT TYP	E & ADDITIV	ES .			
1	325	Premlite II w	/ 10% gel + 3 %	% KCL, 3#'s /sł	CSE + 2# sl	c/kolseal + 1/	2#'s/sk Cello	Flake	
		mixed @ 11	.0 ppg W / 3.43	cf/sk yield					
2	450	50/50 poz W	// 2% Gel + 3%	KCL, .5%EC1	,1/4# sk C.F.	2% gel. 3% s	SM mixed @	14.4 ppg W/ 1	.24 YLD
CENTRALIZ	ER & SCRAT	CHER PLAC	CEMENT			SHOW MAK	E & SPACIN	G	
Centralizers	s - Middle fi	rst, top seco	ond & third. Th	nen every thir	d collar for a	a total of 20	•		
COMPANY F	REPRESENT	ATIVE	Troy Zufelt				DATE		9/22/2005

RECEIVED SEP 2 9 2005 FORM 3160-5 (September 2001)

#### UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB No. 1004-0135 Expires January 31,2004

SUNDRY Do not use the abandoned we	5. Lease Serial N UTU39714 6. If Indian, Allou 7. If Unit or CA/A SUNDANCE U	tee or Tribe Name.				
1. Type of Well  Oil Well Gas Well  Name of Operator Newfield Production Company	8. Well Name and No. FEDERAL 15-18-9-18  9. API Well No.					
3a. Address Route 3 Box 3630 Myton, UT 84052  4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  3b. Phone No. (include are code) 435.646.3721					l, or Exploratory Area te rish, State	_
12. CHECK	APPROPRIATE BOX(		TURE OF N E OF ACTION		THER DATA	_
Notice of Intent  ☐ Subsequent Report ☐ Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injector	Deepen Fracture Treat New Construction Plug & Abandon Plug Back	Reclama Recompl	ete rily Abandon	Water Shut-Off Well Integrity Other	- -
Describe Proposed or Completed Opproposal is to deepen directionally ounder which the work will be perfor involved operations. If the operation Abandonment Notices shall be filed inspection.)  Formation water is produce Ashley, Monument Butte, J	ir recomplete horizontally, give subsined or provide the Bond No. on file in results in a multiple completion or only after all requirements, including the day of the a steel storage tank.	surface locations and measured and e with BLM/BIA. Required subsect recompletion in a new interval, a ng reclamation, have been complete the production water injection facilities by com	me vertical deptr quent reports shall Form 3160-4 shall ed, and the operato meets quality pany or contr	so of an pertinent mark be filed within 30 days be filed once testing h r has determined that t guidelines, it is act trucks. Subs	is following completion of the as been completed. Final the site is ready for final transported to the sequently, the	

produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

> Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY

I hereby certify that the foregoing is true and correct	Title		
Name (Printed/ Typed) Mandie Crozier 1	Regulatory Specialist		
Signature / remche Cusus	Date 11/29/2005		
THIS SPACE FOR F	EDERAL OR STATE OFFI	CE USE	
Approved by	Title	Date	
Conditions of approval, if any, are attached. Approval of this notice does not warranteetify that the applicant holds legal or equitable title to those rights in the subject lead of the conduct operations thereon.	Office	DECENTED	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for a States any false, frictitious and fraudulent statements or representations as to any matter.	ny person knowingly and willfully to make t er within its jurisdiction	to any departual Englandary by Whollinhed	

NOV 3 0 2005

FORM 3160-5

# UNITED STATES

FORM APPROVED

(September 2001)	EPARTMENT OF THE IN	NTERIOR			MB No. 1004-0135 pires January 31,2004	
]	BUREAU OF LAND MANA	GEMENT		5. Lease Serial N	0.	
SUNDRY	NOTICES AND REPO	RTS ON WELLS		UTU39714		
Do not use t abandoned w	his form for proposals to ell. Use Form 3160-3 (AP	drill or to re-enter an D) for such proposals		6. If Indian, Allott	tee or Tribe Name.	
SUBMIT IN T	RIPLICATE - Other Inst	ructions on reverse si-	le	7. If Unit or CA/A	Agreement, Name and/or No	0.
				SUNDANCE U		
1. Type of Well  X Oil Well Gas Well	Other			8. Well Name and	1 No	
2. Name of Operator	_ Other			FEDERAL 15-1		
Newfield Production Company				9. API Well No.		<del></del>
3a. Address Route 3 Box 3630		3b. Phone No. (include are	code)	4304735587		
Myton, UT 84052	T. D. M. or Surray Description	435.646.3721		10. Field and Pool Monument Butt	l, or Exploratory Area e	
4. Location of Well (Footage, Sec 660 FSL 1980 FEL	:., 1., R., M., or survey Descriptio	n)		11. County or Par		
SW/SE Section 18 T9S R1	18E					
				Uintah,UT	THE DATA	4
12. CHECK	K APPROPRIATE BOX(E	S) TO INIDICATE NA	TURE OF N	OTICE, OR OT	HER DATA	
TYPE OF SUBMISSION		TYPI	OF ACTION			
	Acidize	Deepen	Production	n(Start/Resume)	Water Shut-Off	
X Notice of Intent	Alter Casing	Fracture Treat	Reclamat	ion	Well Integrity	
Subsequent Report	Casing Repair	New Construction	Recomple		Other	
Final Abandonment Notice	Change Plans	Plug & Abandon	=	rily Abandon	Variance	
13. Describe Proposed or Completed O	Convert to Injector	Plug Back	Water Di	·		
inspection.)  Newfield Production Comp	oany is requesting a variance Enardo or equivalent vent lively low gas producers (20 s separation and sales.	e from Onshore Order ne valves. Newfield op	43 CFR Part 3 erates wells th	3160 Section 4 on the s	requiring production n the Green River	
a surge of gas when the th	ariance for safety reasons. nief hatches are open. While d, under optimum condition	e gauging tanks, lease o	iks equipped operators will	with back press be subject to br	ure devices will emit eathing toxic gases	
	* No.					
	Name of the state		Accepted	d by the		
12-1-0	5		Accepted Utah Div	rision of	Endoral An	proval Of Th
and the commence were the lay and	Newwork of		ni Gas a	nd Mining	Action !	s Necessary
		•	)II, UUD	2105	AUTON	
I hereby certify that the foregoing	is true and correct	Title Date			Ţ	
Name (Printed/Typed) Mandie Crozier		Regulatorn Speci	1 1/	KVL		
Signature 7	2 / 2	Date				
1/ buth	Moren	11/29/2005				
	THÌS SPACE FO	OR FEDERAL OR ST	ATE OFFIC	E USE		
Approved by		Title		Da	ite	
Approved by Conditions of approval, if any, are attac	ched. Approval of this notice does not	· · · · · · · · · · · · · · · · · · ·				

certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United Section 2015 and fraudulent statements or representations as to any matter within its jurisdiction States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

Office

SUBMIT IN DUPLICATE\* FORM APPROVED

(See other instructions ons OMB NO. 1004-0137

### **UNITED STATES DEPARTMENT OF THE INTERIOR**

Expires: February 28, 1995 reverse side) 5. LEASE DESIGNATION AND SERIAL NO.

		DUKE	AU UF	LAND	VIANAGEIV	/IEIN I					010-	39714
WELL CO	OMPL	ETION	OR RE	COM	PLETION	RE	PORT A	ND LOG*		6. IF INDIAN, AI		
a. TYPE OF WORK										7. UNIT AGREE	N	· · · · · · · · · · · · · · · · · · ·
a. THE OF WORK		OIL		GAS [								
I TURB OF WELL		OIL WELL		WELL	DRY		Other				undar	ice Unit
b. TYPE OF WELL												
NEW W	ORK		_	PLUG [	- NIEE					8. FARM OR LE	ASE NAME	L WELL NO.
	VER	DEEPEN		BACK	DIFF RESVR.		Other			l Fe	ederal 1	5-18-9-18
. NAME OF OPERATOR			L	1		<del></del>				9. WELL NO.	oral i	0 10 0 10
		Ne	wfield E	xplorati	on Compar	าง					43-047	-35587
. ADDRESS AND TELEPHONI								<del>- ·.                                     </del>		10. FIELD AND P		
					Denver, C		202				Eight M	lile Flat
LUCATION OF WELL (F	Report locat									1	L. OR BLO	CK AND SURVEY
At Surface		660	FSL & 18	180, FFT (	SW/SE) Sec.	. 18, 19	IS, R18E			OR AREA		
At top prod. Interval reported	d below									SeSe	c. 18, T	9S, R18E
			_									
At total depth				14. APLNO.	0.47.05507		DATE ISSUED			12. COUNTY OR		13. STATE
T					047-35587			3/23/04		Uinta		UT
15. DATE SPUDDED 16. E 9/8/05	DATE T.D. R	EACHED 1/05	17. DAT		teady to prod.) 28/05	18.1	ELEVATIONS (I 5122	OF, RKB, RT, GR, E	I'C.)*	5134' KB	1	9. ELEV. CASINGHEAD
20. TOTAL DEPTH, MD & TVD		21. PLUG BAG	Y TD MD		22. IF MULTII	DIECON		23. INTERVALS	DOT	ARY TOOLS		CANTE TOOLS
.u. TOTAL DEFTH. MD & TVD	, l	ZI. PLUG BAG	. K. I.D., MD 6	LIVD	HOW MAI		irt	DRILLED BY	1 801	ARY TOOLS	1	CABLE TOOLS
5625'			5560'		1,000			>	l	Χ		
24. PRODUCING INTERVAL(S	D. OF THIS C	OMPLETION-		M. NAME (N	4D AND TVD)*			<u> </u>				5. WAS DIRECTIONAL
, ,					River 4753	3' 522	ر. احا				ľ	SURVEY MADE
				<u> Jieen N</u>	(IVE) 4/3	3-322	.0					No
6. TYPE ELECTRIC AND OTH	IER LOGS R	UN	•									7. WAS WELL CORED
Dual Induction Gu			ensated	Density	, Compens	ated N	Neutron, (	GR, Caliper,	Ceme	ent Bond Le	og	No
23.		,			G RECORD (Re						<u> </u>	-
CASING SIZE/GRAD		WEIGHT			H SET (MD)		OLE SIZE	TOP OF CE	MENT. CE	MENTING RECOR	C.	AMOUNT PULLED
8-5/8" - J-55		24			311'		2-1/4"	To surface	with 160	sx Class "G"	cmt	
5-1/2" - J-55	5	15.	5#	5	606'	1 7	'-7/8"	325 sx Premi	lite II an	d 450 sx 50/5	0 Poz	
29.			ER RECOR	<del></del>				30.		TUBING RECO	ORD	
SIZE	TOP (N	MD)	BOTTON	4 (MD)	SACKS CEMENT	T* S	CREEN (MD)	2-7/8"		DEPTH SET (MD)		PACKER SET (MD)
						-		2-1/0	-	EOT @ 5295'	+	TA @ 5165'
								+ CID CHOT	ED LOTE		couppe	
a. PERFORATION RECORD INTER		e and number	) SIZ	'F	SPF/NUMBE	32.	DEPTH INTI		FRACT	URE, CEMENT AMOUNT AND R		
(CP1&2) 5180'-		219'-5225'	.43		4/60	<del></del>	5180'-		Frac			nd in 570 bbls fluid
(A.5&1) 4753'			.43		4/72		<del>4753'-</del>					nd in 701 bbls fluid
(A.5 <b>Q</b> 1) +755	-1750, 40	300 -4022		<del></del>	7/12	$\rightarrow$	47,00	4022	1140	W/ 55,502# Z	0/40 341	id iii 701 bbis iidid
3.*	· · · · · · · · · · · · · · · · · · ·					UCTION						
DATE FIRST PRODUCTION	İ	PRODUCTIO	N METHOD (	Flowing, gas I	lift, pumpingsize at	nd type of	punip)	D		'		TUS (Producing or shut-in)
11/28/05 DATE OF TEST	11000	NO DESCRIPTION			1-1/2" x 16'					RBBL.		ODUCING
JATE OF TEST	HOU	RS TESTED	CHOKE		PROD'N, FOR TEST PERIOD	OILBBL		GASMCF.	WATE	K1313L.		AS-OIL RATIO
30 day ave					>		71	8		34		113
LOW. FUBING PRESS.	CASII	NG PRESSURI			OIL-BBL.		GASMCF.	<u> </u>	WATER			-API (CORR.)
			24-11OUI	RATE			1			REC	ドバ	FD
				>								
4. DISPOSITION OF GAS (Sold	d, used for fue	l, vented, etc.)	0 11 (		·					test witnesse <b>JAN</b>	) BY 2 2	nne
			Sold 8	& Used f	ror Fuel					JAN	UJ 4	.000
5. LIST OF ATTACHMENTS											-	O RESIDENCE
	<del>-71-</del>		~							DIV. OF OI	<del>L, GAS</del>	& WINING
66. I hereby certify that the to	oregoing an	d attached in	iornation is	complete an	nd correct as deter	rmined fr	om all availabl	le records		Million and		
SIGNED	war	ripl	202	<u>n</u>	70.01.		Regu	ılatory Spec	lalist		DAII _	12/29/2005
VI C			()	-								N 14

	FORMATION	TOP	воттом	DESCRIPTION, CONTENTS, ETC.		TO	P
Well Name       Garden Gulch Mkr       3429'         Federal 15-18-9-18       Garden Gulch 1       3603'         Garden Gulch 2       3711'         Point 3 Mkr       4042'         X Mkr       4202'         Y-Mkr       4240'         Douglas Creek Mkr       4369'         BiCarbonate Mkr       4595'         B Limestone Mkr       4711'         Castle Peak       5148'         Basal Carbonate       5556'					NAME	MEAS, DEPTH	TRUE VERT. DEP
Federal 15-18-9-18   Garden Gulch 1   3603'     Garden Gulch 2   3711'     Point 3 Mkr   4042'     X Mkr   4202'     Y-Mkr   4240'     Douglas Creek Mkr   4369'     BiCarbonate Mkr   4595'     B Limestone Mkr   4711'     Castle Peak   5148'     Basal Carbonate   5556'				Well Name	Garden Gulch Mkr		1 21012
Point 3 Mkr						3603'	
X Mkr					Garden Gulch 2	3711'	
Y-Mkr       4240'         Douglas Creek Mkr       4369'         BiCarbonate Mkr       4595'         B Limestone Mkr       4711'         Castle Peak       5148'         Basal Carbonate       5556'					Point 3 Mkr	4042'	
Douglas Creek Mkr   4369'   BiCarbonate Mkr   4595'   B Limestone Mkr   4711'   Castle Peak   5148'   Basal Carbonate   5556'						4202'	
BiCarbonate Mkr   4595'   B Limestone Mkr   4711'   Castle Peak   5148'   Basal Carbonate   5556'							
B Limestone Mkr 4711' Castle Peak 5148' Basal Carbonate 5556'					Douglas Creek Mkr		
Castle Peak 5148' Basal Carbonate 5556'							
Basal Carbonate 5556'							
Total Depth (LOGGERS 5617)							
	•				Total Depth (LOGGERS)	5617'	
			İ				
			1				
		1	ı		1		1

FORM 3160-5 (September 2001)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0135 Expires January 31,2004

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

UTU39714

Lease Serial No.

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				SUNDANCE UI	NIT
1. Type of Well	T) Other			9 Wall Name and	l No.
X Oil Well Gas Well  2. Name of Operator	Other			8. Well Name and FEDERAL 15-1	
Newfield Production Company				9. API Well No.	
3a. Address Route 3 Box 3630		3b. Phone No. (include a	re code)	4304735587	
Myton, UT 84052		435.646.3721		10. Field and Pool Monument Butte	l, or Exploratory Area
	c., T., R., M., or Survey Description,	)		11. County or Par	
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I hereby certify that the foregoing i	s true and correct	Title			-
Name (Printed/ Typed) Lana Nebeker	n //	Production Cle	rk		
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(Instructions on reverse)

RECEIVED
OCT 2 5 2005

FORM 3160-5 (September 2001)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0135 Expires January 31,2004 Lease Serial No.

SUNDRY NOTICES AND REPORTS ON WEL	ĻS
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#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8 1595 WYNKOOP STREET DENVER, CO 80202-1129 http://www.epa.gov/region8

NOV 1 8 2008

Ref: 8P-W-GW

## CERTIFIED MAIL RETURN RECEIPT REQUESTED

Eric Sundberg Newfield Production Company 1001 Seventeenth Street, Suite 2000 Denver, CO 80202 Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

NOV 2 5 2008

DIV. OF OIL, GAS & MINING

Re: FINAL Permit

EPA UIC Permit UT21178-08109

Well: Federal 15-18-9-18 SWSE Sec. 18-T9S-R18E Uintah County, UT

API No.: 43-047-35587

Dear Mr. Sundberg:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed Federal 15-18-9-18 injection well. A Statement of Basis that discusses the conditions and requirements of this EPA UIC Permit, is also included.

The Public Comment period for this Permit ended on OCT 2 2 2008. No comments on the Draft Permit were received during the Public Notice period; therefore the Effective Date for this EPA UIC Permit is the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect as of the Effective Date of this Permit.

Please note that under the terms and conditions of this Final Permit you are authorized only to construct the proposed injection well. Prior to commencing injection, you first must fulfill all "Prior to Commencing Injection" requirements of the Final Permit, Part II Section C.1, and obtain written Authorization to Inject from the EPA. It is your responsibility to be familiar with and to comply with all provisions of your Final Permit. The EPA forms referenced in the permit are available at http://www.epa.gov/safewater/uic/reportingforms.html. Guidance documents for Cement Bond Logging, Radioactive Tracer testing, Step Rate testing, Mechanical Integrity demonstration, Procedure in the Event of a Mechanical Integrity Loss, and other UIC guidances, are available at http://www.epa.gov/region8/water/uic/ deep\_injection.html. Upon request, hard copies of the EPA forms and guidances can be provided.



This EPA UIC Permit is issued for the operating life of the well unless terminated (Part III, Section B). The EPA may review this Permit at least every five (5) years to determine whether any action is warranted pursuant to 40 CFR § 144.36(a).

If you have any questions on the enclosed Final Permit or Statement of Basis, please call Bruce Suchomel of my staff at (303) 312-6001, or toll-free at (800) 227-8917, ext. 312-6001.

Stephen S. Tuber
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

enclosure:

Final UIC Permit

Statement of Basis

cc:

Letter Only:

Uintah & Ouray Business Committee Ute Indian Tribe:

Curtis Cesspooch, Chairman Ronald Groves, Councilman Irene Cuch, Vice-Chairwoman Steven Cesspooch, Councilman Phillip Chimburas, Councilman Frances Poowegup, Councilwoman

Daniel Picard, Superintendent U.S. Bureau of Indian Affairs Uintah & Ouray Indian Agency

#### All Enclosures:

Michelle Sabori, Acting Director GAP 106 Ute Indian Tribe

Larry Love, Director Energy and Minerals Department Ute Indian Tribe

Elaine Willie, GAP Coordinator Land Use Department Ute Indian Tribe

Gilbert Hunt Associate Director Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office U.S. Bureau of Land Management Vernal, UT

Michael Guinn, District Manager Newfield Production Company Myton, UT



### **\$EPA**

# UNDERGROUND INJECTION CONTROL PROGRAM PERMIT

PREPARED: August 2008

Permit No. UT21178-08109

Class II Enhanced Oil Recovery Injection Well

Federal 15-18-9-18 Uintah County, UT

Issued To

**Newfield Production Company** 

1001 Seventeenth Street, Suite 2000 Denver, CO 80202

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#### Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

Newfield Production Company 1001 Seventeenth Street, Suite 2000 Denver, CO 80202

is authorized to construct and to operate the following Class II injection well or wells:

Federal 15-18-9-18 660' FSL & 1980' FEL, SWSE S18, T9S, R18E Uintah County, UT

EPA regulates the injection of fluids into injection wells so that injection does not endanger underground sources of drinking water (USDWs). EPA UIC Permit conditions are based on authorities set forth at 40 CFR Parts 144 and 146, and address potential impacts to USDWs.

Under 40 CFR Part 144, Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General permit conditions for which the content is mandatory and not subject to site-specific differences are not discussed in this document. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize injury to persons or property or invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. (40 CFR §144.35) An EPA UIC Permit may be issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR §\$144.39, 144.40 and 144.41, and may be reviewed at least once every five (5) years to determine if action is required under 40 CFR §144.36(a).

This Permit is issued for the life of the well(s) unless modified, revoked and reissued, or terminated under 40 CFR 144.39 or 144.40. This EPA Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for a UIC Program is delegated to an Indian Tribe or State. Upon the effective date of delegation, reports, notifications, questions and other correspondence should be directed to the Indian Tribe or State Director.

Issue Date:	NOV 1 8 2008	٠.	Effective Date _	MOV 1 8 2008

Stephen S. Tuber

Assistant Regional Administrator\*

Office of Partnerships and Regulatory Assistance

\*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

#### PART II. SPECIFIC PERMIT CONDITIONS

#### Section A. WELL CONSTRUCTION REQUIREMENTS

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

#### 1. Casing and Cement.

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

#### 2. Injection Tubing and Packer.

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

#### 3. Sampling and Monitoring Devices.

The Permittee shall install and maintain in good operating condition:

- (a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and
- (b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:
  - (i) on the injection tubing; and
  - (ii) on the tubing-casing annulus (TCA); and
- (c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure (MAIP) specified in APPENDIX C is reached at the wellhead; and
- (d) a non-resettable cumulative volume recorder attached to the injection line.

#### 4. Well Logging and Testing

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

#### 5. Postponement of Construction or Conversion

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of Authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or Authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate may be reissued.

#### 6. Workovers and Alterations

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

#### Section B. MECHANICAL INTEGRITY

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

- (a) There is no significant leak in the casing, tubing, or packer (Part I); and
- (b) There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore (Part II).

#### 1. Demonstration of Mechanical Integrity (MI).

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

#### 2. Mechanical Integrity Test Methods and Criteria

EPA-approved methods shall be used to demonstrate mechanical integrity. Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are available from EPA and will be provided upon request.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

#### 3. Notification Prior to Testing.

The Permittee shall notify the Director at least 30 days prior to any scheduled mechanical integrity test. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

#### 4. Loss of Mechanical Integrity.

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit) and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.

#### Section C. WELL OPERATION

INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.

Injection is approved under the following conditions:

#### 1. Requirements Prior to Commencing Injection.

Well injection, including for new wells authorized by an Area Permit under 40 CFR 144.33 (c), may commence only after all well construction and pre-injection requirements herein have been met and approved. The Permittee may not commence injection until construction is complete, and

- (a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-10 or 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and
  - (i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit; or
  - (ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

#### 2. Injection Interval.

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

#### 3. Injection Pressure Limitation

- (a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injection or formation fluids into a USDW.
- (b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permitee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.

#### 4. Injection Volume Limitation.

Injection volume is limited to the total volume specified in APPENDIX C.

#### 5. Injection Fluid Limitation.

Injected fluids are limited to those identified in 40 CFR 144.6(b)(2) as fluids used for enhanced recovery of oil or natural gas, including those which are brought to the surface in connection with conventional oil or natural gas production that may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved for injection. This well is NOT approved for commercial brine injection, industrial waste fluid disposal or injection of hazardous waste as defined by CFR 40 Part 261. The Permittee shall provide a listing of the sources of injected fluids in accordance with the reporting requirements in Part II Section D Paragraph 4 and APPENDIX D of this Permit.

#### 6. Tubing-Casing Annulus (TCA)

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

#### Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

#### 1. Monitoring Parameters, Frequency, Records and Reports.

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

- the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;
- (b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and;
- (c) the analytical techniques or methods used for analysis.

#### 2. Monitoring Methods.

(a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.

- (b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.
- (c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.
- (d) Pressures are to be measured in pounds per square inch (psi).
- (e) Fluid volumes are to be measured in standard oil field barrels (bbl).
- (f) Fluid rates are to be measured in barrels per day (bbl/day).

#### 3. Records Retention.

- (a) Records of calibration and maintenance, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.
- (b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.

#### 4. Annual Reports.

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

#### Section E. PLUGGING AND ABANDONMENT

#### 1. Notification of Well Abandonment, Conversion or Closure.

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

#### 2. Well Plugging Requirements

Prior to abandonment, the injection well shall be plugged with cement in a manner which isolates the injection zone and prevents the movement of fluids into or between underground sources of drinking water, and in accordance with 40 CFR 146.10 and other applicable Federal, State or local law or regulations. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director.

#### 3. Approved Plugging and Abandonment Plan.

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

#### 4. Forty Five (45) Day Notice of Plugging and Abandonment.

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abanonment plan.

#### 5. Plugging and Abandonment Report.

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

- (a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or
- (b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

#### 6. Inactive Wells.

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:

- (a) Provides written notice to the Director;
- (b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and
- (c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.

#### PART III. CONDITIONS APPLICABLE TO ALL PERMITS

#### Section A. EFFECT OF PERMIT

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by rule is prohibited. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of any other Federal, State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

#### Section B. CHANGES TO PERMIT CONDITIONS

#### 1. Modification, Reissuance, or Termination.

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

#### 2. Conversions.

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

#### 3. Transfer of Permit.

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act; in some cases, modification or revocation and reissuance is mandatory.

#### 4. Permittee Change of Address.

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

#### 5. Construction Changes, Workovers, Logging and Testing Data

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging, or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this Permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

#### Section C. SEVERABILITY

The Provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

#### Section D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

#### Section E. GENERAL PERMIT REQUIREMENTS

#### 1. Duty to Comply.

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.

#### 2. Duty to Reapply.

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

#### 3. Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

#### 4. Duty to Mitigate.

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Permit.

#### 5. Proper Operation and Maintenance.

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

#### 6. Permit Actions.

This Permit may be modified, revoked and reissued or teminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

#### 7. Property Rights.

This Permit does not convey any property rights of any sort, or any exclusive privilege.

#### 8. Duty to Provide Information.

The Permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

#### 9. Inspection and Entry.

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

#### 10. Signatory Requirements.

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

#### 11. Reporting Requirements.

- (a) Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility, and prior to commencing such changes.
- (b) Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Monitoring Reports. Monitoring results shall be reported at the intervals specified in this Permit.
- (d) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 30 days following each schedule date.
- (e) Twenty-four hour reporting. The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:
  - (i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or
  - (ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- (f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website http://www.nrc.uscg.mil/index.htm.
- (g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.
- (h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

#### Section F. FINANCIAL RESPONSIBILITY

#### 1. Method of Providing Financial Responsibility.

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

#### 2. Insolvency.

In the event of:

- (a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or
- (b) suspension or revocation of the authority of the trustee institution to act as trustee; or

(c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.

#### **APPENDIX A**

#### WELL CONSTRUCTION REQUIREMENTS

See diagram.

The Federal No. 15-18-9-18 was drilled to a depth of 5600 feet (KB) in the Basal Carbonate Member of the Green River Formation.

Surface Casing (8-5/8") was set to a depth of 311' in a 12-1/4" hole using 160 sacks of Class "G" cement which was circulated to the surface.

Production casing (5-1/2") was set at a depth of 5606' (KB) in a 7-7/8" hole with 325 sacks of Premium Lite II and 450 sacks of 50/50 POZ mix. This well construction is considered adequate to protect USDWs.

The EPA calculates the top of cement as 577 feet from the surface. The Cement Bond Log (CBL) identifies the top of cement at 130'. CBL analysis identifies adequate 80% bond index within the confining zone (3135' - 3400').

The schematic diagram shows enhanced recovery injection perforations in the Douglas Creek Member of the Green River Formation. Additional perforations may be added at a later time between the depths of 3429 feet and the top of the Wasatch Formation (estimated to be 5681 feet) provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and a schematic diagram.

The packer will be set no higher than 100 feet above the top perforation.

#### Federal 15-18-9-18

Spud Date: 09-08-05 Put on Production: 11-28-05

GL: 5122' KB: 5134'

Wellbore Diagram

Initial Production: BOPD, MCFD, BWPD

FRAC JOB 11-18-05 5180-5225' Frac CP1, & CP2 sands as follows: SURFACE CASING 59851# 20/40 sand in 570 bbls Lightning 17 Cement top @ 130° frac fluid. Treated @ avg press of 1769 psi w/avg rate of 25 BPM. ISIP 1900 psi. Calc flush: 5178 gal. Actual flush: 5166 gal. CSG SIZE: 8-5/8" GRADE: J-55 WEIGHT: 24# 11-18-05 4753-4822 Frac BA1, & A.5 sands as follows: 311 99362# 20/40 sand in 701 bbls Lightning 17 LENGTH: 7 jts (301.98') EPA TOC 577 frac fluid. Treated @ avg press of 1676 psi w/avg rate of 25.1 BPM. ISIP 1800 psi. Calc DEPTH LANDED; 311.09' KB Pub 92 Base USDW 722 flush: 4751 gal. Actual flush: 4662 gal. HOLE SIZE:12-1/4" Top Green River 1/83 CEMENT DATA: 160 sxs Class "G" cmt, est 3 bbls cmt to surf. Frac C sands as follows: 20493# 20/40 sand in 290 bbls Lightning 17 01-27-06 4970-4980 frac fluid. Treated @ avg press of 2170 psi w/avg rate of 25 BPM. ISIP 2230 psi. Calc flush: 4968 gal. Actual flush: 4452 gal. **PRODUCTION CASING** Top Trona-Bird's Nest CSG SIZE: 5-1/2" GRADE: J-55 2718 12-6-06 Mehogeny Bench 2740 pump change: Updated rod and tubing detail. WEIGHT: 15,5# LENGTH: 130 its. (5593,20') DEPTH LANDED: 5606.45' KB 3/35 HOLE SIZE: 7-7/8" Green River Shale -3368 Garden Gulch \_\_\_\_\_ Zone CEMENT DATA: 325 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ. CZ 3400 CEMENT TOP AT: 130' Injection Zone: Top of Garden Gulch down to top of Wasatch **TUBING** SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5# NO. OF JOINTS: 165 jts (5153.14') TUBING ANCHOR: 5165.14' KB NO. OF JOINTS: 2 jts (52.65') SEATING NIPPLE: 2-7/8" (1.10') SN LANDED AT: 5230.59' KB NO. OF JOINTS: 2 jts (62.52') TOTAL STRING LENGTH: EOT @ 5294.66' KB Douglas Creek 4369 PERFORATION RECORD SUCKER RODS 11-10-05 5219-5225\* 4 JSPF 24 holes 4753-4758 POLISHED ROD: 1-1/2" x 22' SM 11-10-05 5180-5189 4 JSPF 36 holes SUCKER RODS: 1-2' X 1/4" pony rods, 99-1/4" scrapered rods, 63-1/4" plain 11-18-05 4809-48221 4 JSPF 52 holes 4809-4822 rods, 40- 1/4" scrapered rods, 6-1 1/2" weight rods. 11-18-05 4753-4758' PUMP SIZE: 2-1/2" x 1-1/2" x 15' RHAC w/SM plunger STROKE LENGTH: 86" PUMP SPEED, SPM: 5 SPM Anchor @ 5165' 5180-5189 5219-5225 SN @ 5231' 5556 Basal Carbonate (BC) EOT @ 5295' NEWFIELD PBTD @ 5560' SHOE @ 5606' Federal 15-18-9-18 -5681 Wasatch (estimated 125' below BC) 660' FSL & 1980' FEL SW/SE Section 18-T9S-R18E Uintah Co, Utah API #43-047-35587; Lease #UTU-39714

#### **APPENDIX B**

#### LOGGING AND TESTING REQUIREMENTS

#### Logs.

Logs will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

#### **NO LOGGING REQUIREMENTS**

#### Tests.

Tests will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

TYPE OF TEST	DATE DUE
Step Rate Test	Within 180 days of commencement of injection.
Pore Pressure	Prior to receiving authorization to begin injection.
Standard Annulus Pressure	Prior to receiving authorization to inject and at least once every five years after the last successful demonstration of Part I Mechanical Integrity.

#### **APPENDIX C**

#### **OPERATING REQUIREMENTS**

#### **MAXIMUM ALLOWABLE INJECTION PRESSURE:**

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

	 	MAXIMUM ALLOWED IN	JECTION PRESS	SURE (psi)
WELL NAME		ZONE 1 (Upper)		
Federal 15-18-9-18		1,045		

#### **INJECTION INTERVAL(S):**

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

ELL NAME: Federal 15-18-9-18				· · · · · · ·
	APPROVED INJECTION INTERVAL (KB, ft)		FRACTURE GRADIENT	
FORMATION NAME	TOP	BOTTOM	(psi/ft)	
Green River: Garden Gulch Mbr, Douglas Creek Mbr, Basal Carbonate Mbr	3,429.00	- 5,681.00	0.660	

#### **ANNULUS PRESSURE:**

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

#### **MAXIMUM INJECTION VOLUME:**

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.

#### APPENDIX D

#### MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

OBSERVE	MONTHLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS
	Injection pressure (psig)
OBSERVE	Annulus pressure(s) (psig)
AND RECORD	Injection rate (bbl/day)
11200113	Fluid volume injected since the well began injecting (bbls)
	ANNUALLY
	Injected fluid total dissolved solids (mg/l)
4111177	Injected fluid specific gravity
ANALYZE	Injected fluid specific conductivity

	ANNUALLY
	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and minimum annulus pressure(s) (psig)
DEDOOT	Each month's injected volume (bbl)
REPORT	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis
	Sources of all fluids injected during the year

Injected fluid pH

In addition to these items, additional Logging and Testing results may be required periodically. For a list of those items and their due dates, please refer to APPENDIX B - LOGGING AND TESTING REQUIREMENTS.

#### APPENDIX E

#### PLUGGING AND ABANDONMENT REQUIREMENTS

See diagram.

The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluids into or between USDWs, and in compliance with other federal, state, and local regulations. Tubing, packer, and other downhole apparatus shall be removed. Cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

PLUG 1: Seal injection zone: Set a Cast Iron Bridge Plug (CIBP) no more than 50 ft above the top perforation. Place at least 20 ft of cement on top of the CIBP.

PLUG 2: Seal Mahogany Shale and Trona intervals: Squeeze a cement plug on the backside of the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale at approximately 2,608 to 2,768 ft (unless preexisting backside cement precludes cement-squeezing this interval) followed by a minimum 160 ft balanced cement plug inside the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale, approximately 2,608 to 2,768 ft.

PLUG 3: Seal USDWs: Squeeze a cement plug at approximately 1,183 ft on the backside of the 5-1/2 inch casing across the base of the Uinta/Top of the Green River Formation (unless pre-existing backside cement precludes cement-squeezing this interval), followed by a minimum 100 ft balanced cement plug inside the 5-1/2 inch casing across the base of the Uinta/Top of the Green River Formation, with the midcontact point set at approximately 1,183 ft., with the cement encompassing the depths of approximately 1,133 to 1,233 ft.

PLUG 4: Seal surface: Set a Class G cement plug within the 5-1/2 inch casing to 361 ft and up the 5-1/2 inch by 8-5/8 inch casings annulus to surface.

IT 21178-08109 Federal 15-18-9-18 Plugging & Abandonment Diagram Spud Date: 09-08-05 Initial Production: BOPD, Put on Production: 11-28-05 Proposed P & A MCFD, BWPD GL: 5122' KB: 5134' Wellbore Diagram Cement inside longstring casing from surface to depth of at least 50 bolow surface casing. Pump 42 sx Class G Cement down 5 -1/2" casing to 361' SURFACE CASING Cement top @ 130° CSG SIZE: 8-5/8" coment annulus of surface casing long-string casing from surface to depth of at least, 50' below the GRADE: J-55 Casing Shoe @ 311' WEIGHT: 24# Plug 4 LENGTH: 7 jts (301.98') surface casing shoe. DEPTH LANDED: 311,09' KB HOLE SIZE: 12-1/4" CEMENT DATA: 160 sxs Class "G" cmt, est 3 bbls cmt to surf. Top Green River, 100' balanced cement plug across base of Uinta/ top of Green River. Mid-contact point at approximately 1183. (USDW) 1183 Plug 3 PRODUCTION CASING CSG SIZE: 5-1/2" GRADE: J-55 WEIGHT: 15.5# Trona-Bird's Nest LENGTH; 130 jts. (5593.20') DEPTH LANDED: 5606,45' KB Mahogany 160 cement plug across Trong - Bird's Nest and HOLE SIZE: 7-7/8" MB 2718 CEMENT DATA: 325 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ. Plug 2 zone-2000' -- 2200 top of Mahogany Bench CEMENT TOP AT: 130° oil shale, 2608-2768 Green River Shale 3368 Injection Zone: Top of Garden Gulch down to top of Wasatch 4369 Douglas Creek 100' (12 sx) Class G Cement plug on top of CIBP Plugl CIBP @ 4703 ≤ 50' above top perforation place 5' Cast Iron Plug.
Place 20' of cement on top. 4753-4758 4809-4822 **5180-5189**° 5219-5225 5556 Busal Carbonate (BC)
PBTD@5560 NEWFIELD TD @ 5600' Federal 15-18-9-18 - 5681 Wasnitch (estimated 125' below BC) 660' FSL & 1980' FEL SW/SE Section 18-T9S-R18E Uintah Co, Utah API #43-047-35587; Lease #UTU-39714

#### **APPENDIX F**

#### **CORRECTIVE ACTION REQUIREMENTS**

No corrective action is deemed necessary for this project.

#### STATEMENT OF BASIS

#### NEWFIELD PRODUCTION COMPANY FEDERAL 15-18-9-18 UINTAH COUNTY, UT

#### **EPA PERMIT NO. UT21178-08109**

**CONTACT:** Bruce Suchomel

U. S. Environmental Protection Agency Ground Water Program, 8P-W-GW

1595 Wynkoop Street

Denver, Colorado 80202-1129

Telephone: 1-800-227-8917 ext. 312-6001

This STATEMENT OF BASIS gives the derivation of site-specific UIC Permit conditions and reasons for them. Referenced sections and conditions correspond to sections and conditions in the Permit.

EPA UIC permits regulate the injection of fluids into underground injection wells so that the injection does not endanger underground sources of drinking water. EPA UIC permit conditions are based upon the authorities set forth in regulatory provisions at 40 CFR Parts 144 and 146, and address potential impacts to underground sources of drinking water. Under 40 CFR 144.35 Issuance of this permit does not convey any property rights of any sort or any exclusive privilege, nor authorize injury to persons or property of invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. Under 40 CFR 144 Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General Permit conditions for which the content is mandatory and not subject to site-specific differences (40 CFR Parts 144, 146 and 147) are not discussed in this document.

Upon the Effective Date when issued, the Permit authorizes the construction and operation of injection wells so that the injection does not endanger underground sources of drinking water, governed by the conditions specified in the Permit. The Permit is issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR 144.39, 144.40 and 144.41. The Permit is subject to EPA review at least once every five (5) years to determine if action is required under 40 CFR 144.36(a).

#### PART I. General Information and Description of Facility

Newfield Production Company 1001 Seventeenth Street, Suite 2000 Denver, CO 80202

on

January 18, 2008

submitted an application for an Underground Injection Control (UIC) Program Permit or Permit Modification for the following injection wells:

Federal 15-18-9-18 660' FSL & 1980' FEL, SWSE S18, T9S, R18E Uintah County, UT

Regulations specific to Uintah-Ouray Indian Reservation injection wells are found at 40 CFR 147 Subpart TT.

The application, including the required information and data necessary to issue or modify a UIC Permit in accordance with 40 CFR Parts 144, 146 and 147, was reviewed and determined by EPA to be complete.

The Permit will expire upon delegation of primary enforcement responsibility (primacy) for applicable portions of the UIC Program to the Ute Indian Tribe or the State of Utah unless the delegated agency has the authority and chooses to adopt and enforce this Permit as a Tribal or State Permit.

TABLE 1.1 shows the status of the well or wells as "New", "Existing", or "Conversion" and for Existing shows the original date of injection operation. Well authorization "by rule" under 40 CFR Part 144 Subpart C expires automatically on the Effective Date of an issued UIC Permit.

The Federal No. 15-18-9-18 is currently an active Green River Formation, Douglas Creek Member, oil well. It is the initial intent of the applicant to use the current production perforations for Class II enhanced recovery injection. The Federal No. 15-18-9-18 has total depth in the Basal Carbonate Member.

	TABLE 1.1	
WELL STA	TUS / DATE OF OPERA	TION
	NEW WELLS	
Well Name	Well Status	Date of Operation
Federal 15-18-9-18	New	N/A

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#### PART II. Permit Considerations (40 CFR 146.24)

#### **Hydrogeologic Setting**

Water wells for domestic supply in this area, when present, generally are completed into the shallow alluvium, the Duchesne River Formation, or the underlying Uinta Formation, and the water generally contains approximately 500 to 1,500 mg/L and higher total dissolved solids.

The Uinta-Animas aguifer in the Uinta Basin is present in water-yielding beds of sandstone, conglomerate, and siltstone of the Duchesne River and Uinta Formations, the Renegade Tongue of the Wasatch Formation, and the Douglas Creek Member of the Green River Formation. The Renegade Tongue of the Wasatch Formation and the Douglas Creek Member of the Green River Formation contain an aguifer along the southern and eastern margins of the basin where the rocks primarily consist of fluvial, massive, irregularly bedded sandstone and siltstone. Water-yielding units in the Uinta-Animas aquifer in the Uinta Basin commonly are separated from each other and from the underlying Mesaverde aquifer by units of low permeability composed of claystone, shale, marlstone, or limestone. In the Uinta Basin, for example, the part of the aquifer in the Duchesne River and Uinta Formations ranges in thickness from 0 feet at the southern margin of the aquifer to as much as 9,000 feet in the north-central part of the aquifer. Ground-water recharge to the Uinta-Animas aguifer generally occurs in the areas of higher altitude along the margins of the basin. Ground water is discharged mainly to streams, springs, and by transpiration from vegetation growing along stream valleys. The rate of groundwater withdrawal is small, and natural discharge is approximately equal to recharge. Recharge occurs near the southern margin of the aguifer, and discharge occurs near the White and Green Rivers (from USGS publication HA 730-C). Water samples from Mesaverde sands in the nearby Natural Buttes Unit yielded highly saline water.

#### Geologic Setting (TABLE 2.1)

The proposed enhanced oil recovery injection well is located in the Greater Monument Butte Field, T7-9S and R15-19E, which lies near the center of the broad, gently northward dipping south flank of the Uinta Basin. More than 450 million barrels of oil (63 MT) have been produced from sediments of the Uinta Basin. The Uinta Basin is a topographic and structural trough encompassing an area of more than 9300 square mi (14,900 km) in northeast Utah. The basin is sharply asymmetrical, with a steep north flank bounded by the east-west-trending Uinta Mountains, and a gently dipping south flank. The Uinta Basin was formed in Paleocene to Eocene time, creating a large area of internal drainage which was filled by the ancestral Lake Uinta. The lacustrine, or fresh water lake-formed, sediments deposited in and around Lake Uinta make up the Uintah and Green River Formations. The southern shore of Lake Uinta was very broad and flat, resulting in large cyclic shifts of the location of the shoreline during the many repeated transgressive and regressive cycles caused by the climatic and tectonic-induced rise and fall of water levels of the lake. Distributary-mouth bars, distributary channels, and near-shore bars are the primary oil producing sandstone reservoirs in the area. (Ref: "Reservoir Characterization of the Lower Green River Formation, Southwest Uinta Basin, Utah Biannual Technical Progress Report, 4/1/99-9/30/99", by C. D. Morgan, Program Manager, November 1999, Contract DE-AC26-98BC15103).

The Duchesne River Formation is absent in this area. Shale and siltstone of the Uintah Formation outcrop and compose the surface rock throughout the area. The lower 600 feet to 800 feet of the Uinta Formation, consisting generally of shale interbedded with occasionally water-bearing

sandstone lenses between 5 feet to 20 feet thick, is underlain by the Green River Formation. The Green River Formation is further subdivided into several Member and local marker units. The cyclic nature of Green River deposition in the southern shore area resulted in numerous stacked, intertonguing deltaic and near-shore sand and silt deposits. Red alluvial shale and siltstone deposits that intertongue with the Green River sediments are of the Colton and Wasatch Formations. Under the Wasatch Formation is the Mesaverde Formation, which consists primarily of continental-origin deposits of interbedded shale, sandstone, and coal.

The geologic dip is about 200 feet per mile, and there are no known surface faults in this area. Veins of gilsonite, a natural resinous hydrocarbon occasionally mined as a resource, occurs in the greater Uintah Basin though it is predominantly found on the eastern margin of the basin near the Colorado border. Vertical veins, generally between 2 ft to 6 ft wide but up to 28 ft wide, may extend many miles in length and occasionally extend as deep as 2000 ft. In this area within the Greater Monument Butte Field there is one known gilsonite vein. This vein is not considered to present a pathway for migration of fluid out of the injection zone because it terminates at depth of about 2000 ft, far above the protective confining layer and much deeper injection zone. Newfield and the owner of this former gilsonite mine have agreed to conditions for operation near this vein to ensure no potential for impact to this vein or to ground water from enhanced oil recovery operations.

TABLE 2.1
GEOLOGIC SETTING

#### Federal 15-18-9-18

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Green River	1,183	4,720		
Green River: Trona-Bird's Nest	2,658	2,718		Sodium carbonate
Green River: Mahogany Bench	2,718	2,740		Oil shale
Green River Shale	3,368	3,429		Shale
Green River: Garden Gulch Member	3,429	4,369	22,718	Lacustrine sand, shale, carbonate, interbedded with fluvial sandstone.
Green River: Douglas Creek Mbr	4,369	5,556	22,718	Interbedded sand, shale, and limestone.
Green River: Basal Carbonate	5,556	5,681	22,718	Limestone

#### Proposed Injection Zone(s) (TABLE 2.2)

An injection zone is a geological formation, group of formations, or part of a formation that receives fluids through a well. The proposed injection zones are listed in TABLE 2.2.

Injection will occur into an injection zone that is separated from USDWs by a confining zone which is free of known open faults or fractures within the Area of Review.

The EPA approved interval for Class II enhanced recovery injection is located between the top of the Garden Gulch Member (3429 feet) and the top of the Wasatch Formation estimated to be 5681 feet.

## TABLE 2.2 INJECTION ZONES

Federal 15-18-9-18

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
Green River: Garden Gulch Mbr, Douglas Creek Mbr, Basal Carbonate Mbr	3,429	5,681	22,718	0.660		N/A
* C - Currently Exempted E - Previously Exempted P - Proposed Exemption N/A - Not Applicable						

#### Confining Zone(s) (TABLE 2.3)

A confining zone is a geological formation, part of a formation, or a group of formations that limits fluid movement above the injection zone. The confining zone or zones are listed in TABLE 2.3.

The 61-foot (3368 - 3429 feet) shale Confining Zone overlies the top of the Garden Gulch Member.

# TABLE 2.3 CONFINING ZONES Federal 15-18-9-18 Formation Name Formation Lithology Top (ft) Base (ft) Green River Shale Shale 3,368 3,429

#### Underground Sources of Drinking Water (USDWs) (TABLE 2.4)

Aquifers or the portions thereof which contain less than 10,000 mg/l total dissolved solids (TDS) and are being or could in the future be used as a source of drinking water are considered to be USDWs. The USDWs in the area of this facility are identified in TABLE 2.4.

Throughout the Greater Monument Butte Field area undergoing enhanced oil recovery operations, water analyses of the Green River Formation generally exhibit total dissolved solids (TDS) content well in excess of 10,000 mg/l. However, some recent water analyses from the field showed lower TDS values closer to 10,000 mg/l. While rain and surface water recharge into Green River Formation outcrops further south along the Book Cliffs/Roan Cliffs in effect "freshens" the Green River Formation water near those outcrops, in this area of the Monument Butte Field the observed occasional 'freshening' is ascribed to the effective dilution of the originally in-place high TDS water from injection of relatively fresh water for enhanced oil recovery operations. Water samples from deeper Mesaverde Formation sands in the nearby Natural Buttes Unit yield highly saline water.

The State of Utah Division of Water Rights identifies no public water supply wells within the onequarter (1/4) mile Area-of-Review (AOR) around the Federal No. 15-18-9-18. Technical Publication No. 92: State of Utah, Department of Natural Resources, cites the base of Underground Sources of Drinking Water (USDW) in the Uinta Formation approximately 722 feet from the surface. However, absent definitive information relative to the water quality of the Uinta Formation, from the depth of 722 feet to the base of the Uinta Formation (1183 feet), the EPA will require, during plugging and abandonment, a cement plug at the base of the Uinta Formation to protect contamination of possible Uinta USDWs.

# TABLE 2.4 UNDERGROUND SOURCES OF DRINKING WATER (USDW) Federal 15-18-9-18

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uinta	Predominantly lenticular fluvial sand and shale, with minor lacustrine carbonates.	0	1,183	< 10,000

#### PART III. Well Construction (40 CFR 146.22)

#### See diagram.

The Federal No. 15-18-9-18 was drilled to a total depth of 5600 feet (KB) feet in the Basal Carbonate Member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 311 feet in a 12-1/4 inch hole using 160 sacks of Class "G" cement which was circulated to the surface.

Production casing (5-1/2 inch) was set at a depth of 5606 feet (KB) in a 7-7/8 inch hole with 325 sacks of Premium Lite II and 450 sacks of 50/50 poz mix. This well construction is considered adequate to protect USDWs.

The EPA calculates the top of cement as 577 feet from the surface. The Cement Bond Log (CBL) identifies top of cement at 130 feet. CBL analysis identifies adequate 80% bond index cement bond within the confining zone.

The schematic diagram shows proposed enhanced recovery injection perforations in the Douglas Creek Member of the Green River Formation. Additional perforations may be added at a later time between the depths of 3429 feet and the top of the Wasatch Formation (Estimated to be 5681 feet) provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and schematic diagram.

The packer will be set no higher than 100 feet above the top perforation.

### TABLE 3.1 WELL CONSTRUCTION REQUIREMENTS

#### Federal 15-18-9-18

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
Tubing	7.88	. 2.88	0 - 5,295	-
Long String	7.88	5.50	0 - 5,606	130 - 5,606
Surface	12.25	8.63	0 - 311	0 - 311

The approved well completion plan will be incorporated into the Permit as APPENDIX A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

#### Casing and Cementing (TABLE 3.1)

The well construction plan was evaluated and determined to be in conformance with standard practices and guidelines that ensure well injection does not result in the movement of fluids into USDWs. Well construction details for this "new" injection well is shown in TABLE 3.1.

Remedial cementing may be required if the casing cement is shown to be inadequate by cement bond log or other demonstration of Part II (External) mechanical integrity.

#### **Tubing and Packer**

Injection tubing is required to be installed from a packer up to the surface inside the well casing. The packer will be set above the uppermost perforation. The tubing and packer are designed to prevent injection fluid from coming into contact with the outermost casing.

#### **Tubing-Casing Annulus (TCA)**

The TCA allows the casing, tubing and packer to be pressure-tested periodically for mechanical integrity, and will allow for detection of leaks. The TCA will be filled with fresh water treated with a corrosion inhibitor or other fluid approved by the Director.

The tubing-casing annulus must be kept closed at all times so that it can be monitored as required under conditions of the Permit.

#### **Monitoring Devices**

The permittee will be required to install and maintain wellhead equipment that allows for monitoring pressures and providing access for sampling the injected fluid. Required equipment may include but is not limited to: 1) shut-off valves located at the wellhead on the injection tubing and on the TCA; 2) a flow meter that measures the cumulative volume of injected fluid; 3) fittings or pressure gauges attached to the injection tubing and the TCA for monitoring the injection and TCA pressure; and 4) a tap on the injection line, isolated by shut-off valves, for sampling the injected fluid.

All sampling and measurement taken for monitoring must be representative of the monitored activity.

#### PART IV. Area of Review, Corrective Action Plan (40 CFR 144.55)

TABLE 4.1  AOR AND CORRECTIVE ACTION						
Status Total TOC CAP Well Name Type (Abandoned Y/N) Depth (ft) Depth (ft) Require						
Balcron Fed 31-19Y-9-18	Producer	No	5,510	465	No	
Federal 44-18I	Other	Yes	5,700	0	No	

TABLE 4.1 lists the wells in the Area of Review ("AOR") and shows the well type, operating status, depth, top of casing cement ("TOC") and whether a Corrective Action Plan ("CAP") is required for the well.

#### **Area Of Review**

Applicants for Class I, II (other than "existing" wells) or III injection well Permits are required to identify the location of all known wells within the injection well's Area of Review (AOR) which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the formation, all known wells within the area of review that penetrate formations which may be affected by increased pressure. Under 40 CFR 146.6 the AOR may be a fixed radius of not less than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

#### **Corrective Action Plan**

For wells in the AOR which are improperly sealed, completed, or abandoned, the applicant shall develop a Corrective Action Plan (CAP) consisting of the steps or modifications that are necessary to prevent movement of fluid into USDWs.

The CAP will be incorporated into the Permit as APPENDIX F and become binding on the permittee.

PART V. Well Operation Requirements (40 CFR 146.23)

TABL INJECTION ZON	IE PRESSU	RES	
Federal 1	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
Green River: Garden Gulch Mbr, Douglas Creek Mbr, Basal Carbonate Mbr	4,753	0.660	1,045

#### **Approved Injection Fluid**

The approved injection fluid is limited to Class II injection well fluids pursuant to 40 CFR § 144.6(b). For disposal wells injecting water brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, the fluid may be commingled and the well used to inject other Class II wastes such as drilling fluids and spent well completion, treatment and stimulation fluid. Injection of non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes, and vacuum truck and drum rinsate from trucks and drums transporting or containing non-exempt waste, is prohibited.

The proposed injectate will be a blend of drinking-quality water from the Johnson Water District supply line and/or water from the Green River supply line, as well as Green River Formation water from wells proximate to the Federal No. 15-18-9-18 and mixed at the Beluga Injection Facility.

#### **Injection Pressure Limitation**

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

The applicant submitted injection fluid density and injection zone data which was used to calculate a formation fracture pressure and to determine the maximum allowable injection pressure (MAIP), as measured at the surface, for this Permit.

TABLE 5.1 lists the fracture gradient for the injection zone and the approved MAIP, determined according to the following formula:

$$FP = [fg - (0.433 * sg)] * d$$

FP = formation fracture pressure (measured at surface)

fg = fracture gradient (from submitted data or tests)

sg = specific gravity (of injected fluid)

d = depth to top of injection zone (or top perforation)

#### **Injection Volume Limitation**

Cumulative injected fluid volume limits are set to assure that injected fluids remain within the boundary of the exempted area. Cumulative injected fluid volume is limited when injection occurs into an aquifer that has been exempted from protection as a USDW.

There will be no restrictions on the cumulative volume or daily volume of authorized Class II fluid to be injected into the approved Green River Formation Interval. The Permittee shall not exceed the maximum authorized injection pressure.

#### **Mechanical Integrity (40 CFR 146.8)**

An injection well has mechanical integrity if:

- 1. there is no significant leak in the casing, tubing, or packer (Part I); and
- 2. there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II).

The Permit prohibits injection into a well which lacks mechanical integrity.

The Permit requires that the well demonstrate mechanical integrity prior to injection and periodically thereafter. A demonstration of mechanical integrity includes both internal (Part I) and external (Part II). The methods and frequency for demonstrating Part I and Part II mechanical integrity are dependent upon well-specific conditions as explained below.

Well construction and site-specific conditions dictate the following requirements for Mechanical Integrity (MI) demonstrations:

PART I MI: Internal MI will be demonstrated prior to beginning injection. Since this well is constructed with a standard casing, tubing, and packer configuration, a successful mechanical integrity test (MIT) is required to take place at least once every five (5) years. A demonstration of Part I MI is also required prior to resuming injection following any workover operation that affects the casing, tubing, or packer. Part I MI may be demonstrated by a standard tubing-casing annulus pressure test using the maximum permitted injection pressure or 1000 psi, which ever is less, with a ten (10) percent or less pressure loss over thirty (30) minutes.

#### PART VI. Monitoring, Recordkeeping and Reporting Requirements

#### **Injection Well Monitoring Program**

At least once a year the permittee must analyze a sample of the injected fluid for total dissolved solids (TDS), specific conductivity, pH, and specific gravity. This analysis shall be reported to EPA annually as part of the Annual Report to the Director. Any time a new source of injected fluid is added, a fluid analysis shall be made of the new source.

Instantaneous injection pressure, injection flow rate, cumulative fluid volume and TCA pressures must be observed on a weekly basis. A recording, at least once every thirty (30) days, must be made of the injection pressure, annulus pressure, monthly injection flow rate and cumulative fluid volume. This information is required to be reported annually as part of the Annual Report to the Director.

#### PART VII. Plugging and Abandonment Requirements (40 CFR 146.10)

#### **Plugging and Abandonment Plan**

Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs, and in accordance with any applicable Federal, State or local law or regulation. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520 13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. The plugging and abandonment plan is described in Appendix E of the Permit.

#### See Schematic Diagram

The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs and in accordance with other applicable Federal, State or local law or

regulation. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs. However, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. Within sixty (60) days after plugging, the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

PLUG NO. 1: Seal Injection Zone: Set a cast iron bridge plug (CIBP) no more than fifty (50) feet above the top injection perforation. Place at least twenty (20) feet of cement plug on top of the CIBP.

PLUG NO. 2: Seal Mahogany Shale and Trona intervals: Squeeze a cement plug on the backside of the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale approximately 2608 feet to 2768 feet (unless pre-existing backside cement precludes cement-squeezing this interval) followed by a minimum 160-foot balanced cement plug inside the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale, approximately 2608 feet to 2768 feet.

PLUG NO. 3: Seal USDWs: Squeeze a cement plug on the backside of the 5-1/2 inch casing across the base of the Uinta formation approximately 1133 feet to 1233 feet (unless pre-existing backside cement precludes cement-squeezing this interval), followed by a minimum 100-foot balanced cement plug inside the 5-1/2 inch casing across the base of the Uinta Formation, approximately 1133 feet to 1233 feet.

PLUG NO.4: Seal Surface: Set a Class "G" cement plug within the 5-1/2 inch casing to 361 feet and up the 5-1/2 inch by 8-5/8 inch casings annulus to the surface.

#### PART VIII. Financial Responsibility (40 CFR 144.52)

#### **Demonstration of Financial Responsibility**

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

Schedule A of the Financial Statement describing Federal 15-18-9-18 in the amount of \$59,344 has been reviewed and approved by the EPA on 10/3/08.

Financial Statement, received April 22, 2005

Evidence of continuing financial responsibility is required to be submitted to the Director annually.